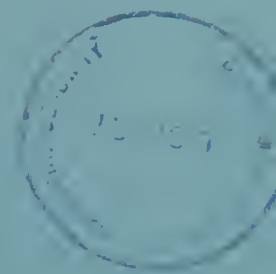


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# REPORT

ON THE

## Health of the County Borough of Belfast for the Year 1970

Dr. JAMES McA. TAGGART

*Medical Officer of Health*





# REPORT

ON THE

**Health of the County Borough of Belfast**

**FOR THE YEAR 1970**

**Dr. JAMES McA. TAGGART**

*Medical Officer of Health*



# Health Committee

## 1970

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**Chairman:**

Councillor Captain WALTER SHANNON, J.P.

**Deputy Chairman:**

Councillor WILLIAM CHRISTIE, M.B.E., J.P.

**Aldermen:**

WILLIAM ROBINSON BOYD

**Councillors:**

JOHN SAMUEL ROLSTON HARCOURT

Miss IRENE MARGARET ELIZABETH McALERY

HUGH ROBERT BROWN, M.Com.Sc., J.P.

JOHN WILLIAM KENNEDY, O.B.E., J.P., M.P.

Captain WALTER SHANNON, J.P.

JOHN GIBSON ARMSTRONG (Died 2nd February 1971)

WILLIAM CHRISTIE, M.B.E., J.P.

THOMAS FITZPATRICK

JOHN LAVELLE

FRANCIS WILLS WATSON, O.B.E., M.C., J.P.

WILLIAM CECIL CORRY

JOSEPH HANNA

Mrs. MARGARET MISKIMMIN

**HEALTH DEPARTMENT**  
**STAFF AS AT 1st JULY, 1971**

---

Medical Officer of Health and Port Medical Officer:—  
J. McA. Taggart, M.B., B.Ch., D.P.H., D.P.A., F.R.S.H.

Deputy Medical Officer of Health and Deputy Port Medical Officer:—  
W. J. McLeod, M.D., D.P.H., D.P.A., Ph.C.

**HEADQUARTERS:—**

Administrative Officer:— S. N. Smith, B.Com.Sc.

**Administrative Branch:—**

3 Receptionist/Operators.

**Accounts Branch:—**

1 Executive Officer; 1 Senior Clerical Officer; 2 Clerical Officers, 1 Clerical Assistant.

**Stores Branch:—**

1 Executive Assistant; 3 Clerical Assistants; 1 Storekeeper; 2 Storemen.

**Registration Branch:—**

Superintendent Registrar of Births, Deaths and Marriages: — T. S. McMonagle.

1 Deputy Supt. Registrar; 8 Registrars; 3 Deputy Registrars; 2 Typists.

**Typing Branch:—**

1 Supervisor of Typists; 5 Shorthand Typists; 1 Copy Typist.

**ENVIRONMENTAL HEALTH DIVISION:—**

Senior Medical Officer—vacant.

Administrative Assistant—G. H. Davis, E.R.D.

**Infectious Diseases Branch:—**

Medical Officer—Vacant

1 Executive Assistant; 1 Clerical Officer; 6 Clerical Assistants.

**Sanitary Branch:—**

Chief Public Health Inspector

—W. Jenkins, M.R.S.H., M.A.P.H.I.

Senior Food Inspector

—R. J. Coulter, A.M.R.S.H., M.A.P.H.I.

Senior Pests and Disinfecting Officer

—E. C. Young, M.A.P.H.I.

Senior Inspector of Factories and Shops

—P. J. McMahon, M.A.P.H.I.

Senior Smoke Officer

—C. Ellison, M.A.P.H.I.

Senior Port Public Health Inspector

—W. A. McBride

Senior Housing Inspector

—A. Bunting

Divisional Public Health Inspector, South

—T. Taylor, M.R.S.H., M.A.P.H.I.

Divisional Public Health Inspector, West

—J. G. Butler, M.A.P.H.I.

Divisional Public Health Inspector, East

—T. F. Mills, M.A.P.H.I.

Divisional Public Health Inspector, North

—J. Thompson

Health Education and Training Officer

—B. P. Hanna, M.A.P.H.I.

5 Food and Drugs Inspectors; 2 Port Public Health Inspectors; 4 Factory and Shops Inspectors; 1 Smoke Inspector; 2 Housing Inspectors; 23 Public Health Inspectors; 5 Pests Officers; 10 Pupil Public Health Inspectors.

1 Executive Officer; 3 Executive Assistants; 1 Senior Clerical Officer; 7 Clerical Officers; 7 Clerical Assistants; 1 Notice Server; 5 Drivers; 1 Attendant (Disinfecting Station); 1 Labourer.

**Meat Inspection Branch:—**

City Veterinarian—J. F. Gracey, Ph.D., B.Agr., M.R.C.V.S., D.V.S.M.

Deputy City Veterinarian—W. T. Morrow, B.V.M.S., M.R.C.V.S.

Senior Meat Inspector—S. J. C. Boyd.

7 Meat Inspectors; 1 Asst. Experimental Officer; 1 Clerical Assistant; 1 Copy Typist.



## **COMMUNITY HEALTH DIVISION:—**

- Senior Medical Officer — K. M. Corbett, M.D., B.Sc., D.P.H., D.C.H.  
Clinic Medical Officers — M. S. Lyons, M.B., D.R.C.O.G.  
— R. Hill, M.B., D.P.H.
- 20 Part-time Medical Officers
- Chief Nursing Officer — Miss J. Stirling, S.R.N., S.C.M., H.V.Cert.  
Deputy Superintendent Nursing Officer — Vacant  
Superintendent of District Nurses — Vacant  
Supervisor of Midwives — Mrs. M. A. Whinnery, S.R.N., R.S.C.N., S.C.M.  
Area Superintendent Health Visitors — Miss K. Smyth, S.R.N., S.C.M., H.V.Cert., T.A.Cert.  
— Miss D. E. McFarland, S.R.N., S.C.M., H.V.Cert.
- First Assistant Supt. District Nurses — Miss M. L. Lester, S.R.N., S.C.M., H.V.Cert., Q.N.  
Second Asst. Supt. District Nurses — Miss M. Coleman, S.R.N., S.C.M., Q.N.
- 4 Group Advisor Health Visitors; 62 Health Visitors; 7 Trainee Health Visitors; 4 Senior District Nurses; 62 District Nurses; 4 Nurses; 9 Staff Nurses; 11 Enrolled Nurses; 5 Part-time Nurses; 2 Senior Midwives; 19 Midwives; 8 Part-time Midwives.
- Chiropodists : 6 full-time, 3 part-time.
- Administrative Assistant — A. Watson, A.C.I.S.
- 2 Executive Assistants; 1 Senior Clerical Officer; 4 Clerical Officers; 2 Copy Typists; 12 Clerical Assistants; 18 Clinic Clerks (part-time).

## **SCHOOL HEALTH DIVISION:—**

- Senior Medical Officer:— A. L. Walby, M.B., D.P.H.
- Clinic Medical Officers:— A. D. Campbell, M.B., D.P.H.  
P. S. Kerr, M.B., D.P.H.  
K. McKee, M.D., D.P.H., D.C.H.  
F. L. O'Rourke, M.B., D.P.H.
- Medical Officers: — D. B. Keith, M.B., D.P.H.  
S. G. Gordon, M.B., B.S., M.R.C.S., L.R.C.P., D.P.H., D.C.H., D.T.M.H.  
D. C. Oswald, M.B., D.P.H.  
J. E. G. McCulloch, M.B.  
5 Part-time Medical Officers
- Chief Dental Officer: — S. R. Sheane, L.D.S.
- Clinic Dental Officers: — T. S. Brannigan, L.D.S.  
H. C. Thornberry, L.D.S.  
P. J. R. Griffith, M.B., L.D.S.
- Dental Officers: — W. J. Hutchinson, L.D.S.  
W. J. C. Davidson, L.D.S.  
Mrs. D. Bolton, L.D.S.  
C. A. Fetherston, L.D.S.  
D. H. McMullan, L.D.S.  
Mrs. E. M. Sweeney, L.D.S.  
T. A. Bell, L.D.S.  
R. A. Carser, B.D.S.
- 3 Part-time Medical Officers (Anaesthetists); 3 Part-time Dental Officers.
- 4 Group Advisor Health Visitors; 23 Health Visitors; 6 Clinic Nurses; 2 State Enrolled Nurses; 2 Part-time Nurses; 2 Speech Therapists; 3 Speech Therapists (part-time); 3 Trainee Speech Therapists; 2 Physiotherapists; 1 Chief Dental Clerk; 3 Senior Dental Surgery Assistants; 25 Dental Surgery Assistants.
- Administrative Assistant — W. W. Magowan, J.P.
- 1 Executive Assistant; 2 Clerical Officers; 3 Shorthand Typists; 3 Typists; 3 Senior Clerical Assistants; 8 Clerical Assistants; 2 Clinic Caretakers; 1 Clinic Attendant.

# CITY AND COUNTY BOROUGH OF BELFAST

## SUMMARY OF STATISTICS, 1970

LATITUDE 54° 35' N.; LONGITUDE 5° 55' W.

AREA (Census 1966: excluding 2,237 acres tidal and inland water): 15,815 acres (24.7 sq. miles)

POPULATION (Estimate of Registrar-General, 30th June, 1970)  
(Census, October 1966 — 398,405)

383,600  
(Males 181,800)  
(Females 201,800)

POPULATION per acre: 24; per square mile: 15,530

INHABITED BUILDINGS (Census 1966): 115,435.

RATEABLE VALUATION (1970/71): £5,642,858

PRODUCT OF A 1p RATE (1970/71): £52,848.

MARRIAGES: 3,760; MARRIAGE RATE: 9.8

	1970	1969	Average 1960/69
Live Births (M. 3,602; F. 3,314) ..	6,916	7,173	8,330
Rate .. .. .	18.0	18.6	20.5
Still Births (M. 52; F. 67) ..	119	121	182
Rate (per 1,000 total births) ..	17	17	21.4
Illegitimate live births (M. 199; F. 199) ..	398	392	297
Per cent of live births .. .. .	5.8	5.5	3.6
Deaths (M. 2,383; F. 2,335) ..	4,718	4,829	4,791
Rate .. .. .	12.3	12.5	11.8
Infant Deaths (M. 117; F. 78) ..	195	212	248
Rate (per 1,000 live births) ..	28	30	29.8
Neo-natal Deaths (M. 83; F. 49) ..	132	116	159
Rate (per 1,000 live births) ..	19	16	19.1
Peri-natal Deaths (M. 118; F. 111) ..	229	217	320
Rate (per 1,000 total births) ..	33	30	37.6
Maternal Deaths .. .. .	Nil	1	2
Rate (per 1,000 total births) ..	—	0.1	0.3

	Deaths	Death Rate
Measles	1	0.0
Diphtheria	Nil	—
Whooping Cough	Nil	—
Poliomyelitis	Nil	—
Influenza	75	0.20
Tuberculosis (respiratory)	18	0.05
Tuberculosis (other forms)	6	0.02



To: The Right Honourable The Lord Mayor, Aldermen and Councillors of the Belfast County Borough Council acting as The Belfast Health Authority and The Belfast Port Health Authority.

My Lord Mayor, Ladies and Gentlemen,

I have pleasure in presenting my report on the work of the Health Department and the health of the City for the year 1970.

#### *Population:*

The Registrar-General estimated the population in June, 1970 as 383,600 (males 181,800; females 201,800) a reduction of 2,300 compared with 1969. This population reduction, in keeping with the trend of recent years, is due to re-housing outside the City boundary resulting from the slum clearance and redevelopment programmes of the Corporation and the Northern Ireland Housing Trust.

#### *Births and Deaths:*

There was a reduction in the number of live births registered - 6,916 - (males 3,602; females 3,314) giving a birth rate of 18.0 as compared with 7,173 (birth rate 18.6) in 1969. Infant mortality showed a decrease, the rate being 28 per 1,000 live births as against 30 in 1969. Deaths occurring during the first month of life numbered 132, giving a neo-natal rate of 19. The peri-natal rate (stillbirths and deaths during the first week) was 33 as against 30 in the previous year.

Domiciliary midwives conducted 203 confinements in patients' own homes, a reduction of 285 when compared with 1969. The changing pattern of the work of the domiciliary midwife is again evidenced by the fact that during the year 5,374 mothers (5,145 in 1969) were attended by our midwives following discharge from hospital, a total of 38,481 visits being recorded. In addition the majority of midwives attended general practitioner ante-natal clinics totalling 33 per week. In all they carried out 23,250 ante-natal examinations during the year.

#### *Maternal Mortality:*

No deaths occurred during the year attributable to pregnancy, childbirth and the puerperal state.

#### *Tuberculosis:*

Deaths from all forms of tuberculosis totalled 24 (18 respiratory), showing a decrease of 11 from the figure for 1969. There has been an encouraging reduction in the incidence of this disease in all its forms in recent years, although there was a slight increase in the number of cases notified (142 in 1970; 127 in 1969). In the field of tuberculosis control close liaison continues to be maintained between our tuberculosis health visitors and consultant chest physicians. B.C.G. clinics are conducted from health department premises by our own medical staff who also provide this service for hospital personnel.

#### *Cancer:*

Deaths from cancer, which is the second most important cause of death, numbered 887 as against 918 in 1969. For the first time in several years there was a slight decrease in the number of deaths from cancer of the respiratory system (226 as against 264 for 1969) but deaths from cancer of the lung in males continued at a high rate of 188 in 1970. An analysis of the deaths from malignant neoplasms is given in Table 8.

#### *Infectious Disease:*

With the notable exception of gastro-enteritis, where the number of cases notified, 831, exceeded the record total of 828 in 1969, the majority of notifiable infections had an incidence lower than the 10 year average.

#### *Community Nursing and Health Visiting:*

Owing to the continuation of civil unrest with its resultant impact on the health and well-being of mothers and young children and the aged, the work of health visitors and district nurses has increased considerably. The frequent movement of families from one area of the City to another has increased the problem of family tracing and follow-up work. Added to this have been the problems of overcrowding and adapting to life in temporary housing accommodation. In spite of community tensions, health visitors, district nurses and midwives have continued to carry out their duties in all parts of the City with marked efficiency, often under conditions not without risk to their personal safety.

### *Co-operation with Hospital and General Practitioner Services:*

As described in previous reports the close liaison between the Health Department and hospital and general practitioner services has been further strengthened throughout the year. Twenty-two health visitors are now working in full attachment with group practices and nine others have liaison attachment to smaller groups or single handed practices. All concerned in these schemes are convinced that this arrangement is to the mutual benefit of doctor and nurse and ultimately results in the provision of a more efficient service for the patient. This is also true in the case of attachments of district nurses to group practices and health centres. One problem at present is that the demand by general practitioners for the attachment of these ancillary nursing staff far exceeds the availability on present establishment.

### *Chiropody:*

The chiropody service which is available free of charge to priority groups, e.g., the handicapped and expectant and nursing mothers in addition to the aged, enables many patients to move about in comfort when they might otherwise be confined to their homes or in some cases bedridden. Unfortunately, continuing shortage of chiropodists prevents the expansion of a service which is in ever increasing demand and which faces the apparently permanent problem of expanding waiting lists which cause frustration to staff and patients alike. During the year 21,970 treatments were carried out at clinics and at patients own homes.

### *Environmental and General Sanitary Services:*

The Sanitary Department continued its wide and varied range of duties described in detail in the report of the Chief Public Health Inspector. The Department continues to second students for training for the Public Health Inspector's Diploma. There were ten students in training at the end of the year.

### *Food Hygiene:*

It is essential that a high standard of food hygiene be maintained by all those engaged in the manufacture, storage, transport, sale and serving of food and much of the time of the Food and Drugs Inspectors is taken up with the important work of making the public aware of the importance of this. The success of these endeavours lies in the field of health education and careful persuasion rather than in resort to legal action. One public health inspector devotes his whole time to health education in food hygiene and his duties include training of pupil public health inspectors and arranging lecture and demonstration programmes for students taking catering and food hygiene courses and for those engaged in the food trade.

### *Flooding:*

During the month of August, following several days of continuous heavy rain, severe flooding occurred in different parts of the City, the South and West divisions being the most severely affected, resulting in the involvement of some 2,000 houses, some of which were flooded to a depth of several feet. Many houses were rendered temporarily uninhabitable and some were so severely damaged as to make them unfit for further habitation. Flooding of homes caused much distress to their occupants who suffered great personal loss including in some cases total loss of household equipment, furniture, furnishings, bedding and personal effects and clothing. This disaster placed an added burden on the health and welfare services, but especially on the public health inspectorate who were totally involved in the flooded areas for several weeks.

When the initial mopping-up had been completed the task of rendering the damaged property fit for habitation began and this involved considerable work by the City Surveyor's and Estates Departments personnel. It was found necessary in many instances to remove flooring so that under-floor spaces could be pumped dry and ventilated. Large quantities of disinfectant were issued by the Health Department to affected households in order to camouflage offensive smells and reassure worried tenants regarding the possibility of infection. In spite of contamination of many houses by sewage-polluted water and the soiling of streets and passageways, with the exception of some children who complained of nausea and diarrhoea, there was no increase in the instances of infectious disease occurring in flooded areas. There was much public concern about the possible contamination of water supplies but frequent bacteriological examinations confirmed that no such contamination had occurred. In addition to the damage to housing, flood water also damaged many business premises and large quantities of foodstuffs were destroyed. Officers of the Food and Drugs Section were engaged for several days in assessing the fitness of food for human consumption with the result that some 54 tons of food required condemnation and destruction under supervision.



## *Smoke Control*

The Corporation's first five year programme for the establishment of smoke control areas provided for a total of five areas, one major area to be dealt with annually during the period 1968 — 1972. This was in addition to slum clearance and redevelopment areas which would become smoke free as redevelopment progressed. Good progress has been made and the first three areas are now in operation. Owing to civil unrest it was found necessary to defer two areas in West Belfast but additional areas were added including the entire central area of the City, which will be subject to Smoke Control Orders. The second five year programme 1972-1976 will consist of a number of areas situated in separate parts of the City, e.g., Belmont, Garnerville, Ballygomartin, Glencairn, Orangefield, Cavehill Road, Strandtown and Ravenhill. Some of the proposed areas in East Belfast will link up with smoke control areas already operated by Castlereagh and Hillsborough Rural District Councils, thus giving large areas of smoke-free housing development. The Corporation's first five year programme, together with redevelopment, resulted in over 11,000 houses being included in Smoke Control Areas. The second programme will involve over 21,000 houses. When one includes properties dealt with by Smoke Control Orders and those involved in slum clearance and redevelopment and motorway construction schemes, it is estimated that approximately 47,000 houses will have been rendered smokeless during the next seven years. When the Health Committee approved the first five year programme in 1966 it was estimated that the entire City could be made smokeless in 20 years: if present progress can be maintained and future programme targets reached, it would appear that this forecast will prove correct.

This report contains statistical information as required by the Ministry of Health and Social Services and officers in charge of each section give a detailed account of the various duties carried out by their divisions.

I would like to thank the Chairman and Members of the Health Committee for their consideration and support in furthering the cause of health in the City, the Town Clerk, the Heads and officers of other departments with whom my work is closely associated and finally the members of staff of the Health Department for their conscientious service and for their loyalty, co-operation and support throughout the year.

I have the honour to be

My Lord Mayor, Ladies and Gentlemen,

Your obedient servant,

J. McA. TAGGART,

*Medical Officer of Health and Port Medical Officer.*

CAUSES OF DEATH AT DIFFERENT AGE PERIODS, 1970

TABLE 1

Abbreviated List Nos.	Causes of Death	Total Deaths	MALES												FEMALES												
			All Ages	AGED								All Ages	AGED														
				Under 4 wks.	5-14 yrs.	15-24 yrs.	25-44 yrs.	45-64 yrs.	65-74 yrs.	75 yrs. and over	Under 4 wks.		5-14 yrs.	15-24 yrs.	25-44 yrs.	45-64 yrs.	65-74 yrs.	75 yrs. and over									
	All Causes	4,718	2,383	83	19	15	117	16	14	23	90	712	742	669	2,335	49	18	11	78	12	11	9	64	435	647	1,079	
B1	Cholera	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B2	Typhoid Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B3	Bacillary dysentery and Amoebiasis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B4	Enteritis and Other Diarrhoeal Diseases	23	15	3	6	2	11	2	—	—	—	—	—	2	—	—	—	—	7	—	—	—	—	—	—	—	1
B5	Tuberculosis of Respiratory System	18	8	—	—	—	—	—	—	—	—	—	3	1	—	—	—	—	—	—	—	—	—	—	—	—	4
B6	Other Tuberculosis	6	3	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1
B7	Plague	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B8	Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B9	Whooping Cough	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B10	Streptococcal Sore Throat and Scarlet Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B11	Meningococcal Infection	4	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B12	Acute Poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B13	Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B14	Measles	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B15	Typhus and Other Rickettsioses	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B16	Malaria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B17	Syphilis and its sequelae	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B18	Other Infective and Parasitic Diseases	9	5	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B19 a-f	Cancer	887	466	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B19 g	Hodgkin's Disease and Leukaemia	33	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B20	Benign and Unspecified Neoplasms	15	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B21	Diabetes Mellitus	40	13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B22	Avitaminoses and Other Nutritional Deficiency	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B23	Anaemias	11	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B24	Meningitis	9	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
B25	Active Rheumatic Heart Disease	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—





**TABLE 2**

Age Group (Years)	Deaths			Rate per 1,000 of population of age group (based on 1966 Census figures)	Percentage of total deaths  1970
	Male	Female	Total		
Under 1 year	117	78	195	24.5	4.1
1-4	16	12	28	0.9	0.6
5-14	14	11	25	0.4	0.5
15-24	23	9	32	0.5	0.7
25-44	90	64	154	1.8	3.3
45-64	712	435	1,147	12.3	24.3
65-74	742	647	1,389	45.1	29.4
75 and over	669	1,079	1,748	118.3	37.1

Principal causes of death in order of importance

**TABLE 3**

1.	Heart disease	1,528
2.	Cancer	887
3.	Vascular lesions affecting the central nervous system	576
4.	Bronchitis	372
5.	Pneumonia	265
6.	Violent and accidental deaths	187
7.	Hypertension	64
8.	Chronic rheumatic heart disease	61
9.	Congenital anomalies	59

Comparative Statistics for Counties and County Boroughs

**TABLE 4**

Area	Rate per 1,000 population				Rate per 1,000 births		Still-birth rate per 1,000 total births	Accidental deaths
	Marriage	Birth	Death	Death rate from tuber- culosis	Infant mortality (1,000 live)	Maternal mortality (1,000 total)		
Northern Ireland	8.1	21.0	10.9	0.04	22	0	15	599
Belfast C.B.	9.8	18.0	12.3	0.04	28	0	17	157
Londonderry C.B.	8.5	23.5	10.1	0.05	26	0	15	20
Co. Antrim	7.3	22.4	9.3	0.02	23	0	13	131
Co. Armagh	7.5	22.2	10.5	0.04	18	0	12	45
Co. Down	6.8	19.9	11.1	0.04	19	0	12	119
Co. Fermanagh	7.9	20.3	11.9	0.02	21	0	15	22
Co. Londonderry	8.1	25.2	10.0	0.03	22	0	13	48
Co. Tyrone	8.2	23.1	11.3	0.05	23	0	15	57



## Trend of mortality from certain principal causes of death from 1910

**TABLE 5**

Year	Heart disease (B26, 27A, 28, 29)		Cancer		Respiratory tuberculosis		Bronchitis, Influenza and Pneumonia	
	Number	Rate per 1,000	Number	Rate per 1,000	Number	Rate per 1,000	Number	Rate per 1,000
1910	—	—	—	—	825	2.1	1,538	3.9
1915	—	—	—	—	813	2.0	1,667	4.1
1920	—	—	—	—	762	1.8	1,566	3.8
1925	—	—	—	—	575	1.3	1,163	2.7
1930	852	2.0	466	1.12	346	1.0	839	2.0
1935	935	2.0	463	0.99	389	0.89	1,042	2.23
1940	1,387	3.1	576	1.29	412	0.93	1,001	2.25
1945	1,130	2.59	664	1.52	326	0.75	533	1.22
1950	1,500	3.33	717	1.59	225	0.5	565	1.26
1955	1,365	3.0	741	1.6	76	0.17	597	1.3
1956	1,297	2.9	840	1.89	74	0.16	471	1.06
1957	1,383	3.14	844	1.9	60	0.13	592	1.34
1958	1,493	3.42	822	1.88	56	0.13	549	1.25
1959	1,443	3.33	802	1.85	62	0.16	657	1.51
1960	1,476	3.4	793	1.84	28	0.07	546	1.25
1961	1,425	3.4	763	1.83	35	0.08	876	2.1
1962	1,428	3.45	777	1.87	39	0.09	520	1.25
1963	1,616	3.92	788	1.91	52	0.13	672	1.63
1964	1,433	3.5	794	1.94	34	0.08	580	1.41
1965	1,495	3.67	810	1.99	27	0.07	633	1.55
1966	1,442	3.58	844	2.09	22	0.05	900	2.24
1967	1,431	3.84	796	1.99	22	0.06	512	1.28
1968	1,540	3.94	920	2.35	24	0.06	586	1.5
1969	1,560	4.04	918	2.38	27	0.07	696	1.8
1970	1,528	3.98	887	2.31	18	0.05	712	1.8

— Signifies information not available

Comparative Statistics: Belfast, Northern Ireland, England and Wales,  
Scotland and Irish Republic**TABLE 6**

	Belfast	Northern Ireland	England and Wales	Scotland	Irish Republic
1. Rates per 1,000 population:					
Marriage	9.8	8.1	8.5	8.3	7.0
Birth	18.0	21.0	16.0	16.8	21.8
Death	12.3	10.9	11.8	12.2	11.5
2. Death rate per 1,000 births:					
Maternal	Nil	Nil	0.18	0.19	0.28
Infant	28	22	18	20	19
3. Death rates per 100,000 population:					
Tuberculosis	6.3	4.3	3.3	5.4	7.6
Cancer	231	177	239	243	189
Heart diseases (B26, 27A, 28, 29)	398	380	380	414	364
Coronary disease (B28)	327	295	284	338	265
Diphtheria	Nil	Nil	0.0	Nil	Nil
4. Still-birth rate per 1,000 total births	17	15	13	14	14

Population, births, birth rate per 1,000, deaths, death rate per 1,000 and  
natural increase from 1890

**TABLE 7**

Year	Population	Births		Deaths		Natural increase
		Number	Rate	Number	Rate	
1890	232,222	8,250	35.5	6,861	29.5	1,389
1895	295,000	9,772	33.1	7,168	24.3	2,604
1900	359,000	11,192	31.2	7,642	21.3	3,550
1905	360,000	11,395	31.8	7,178	20.0	4,217
1910	391,167	10,888	27.8	7,284	18.6	3,604
1915	403,000	10,196	25.3	7,220	17.9	2,976
1920	413,000	12,144	29.4	7,234	17.5	4,910
1925	438,000	10,234	23.4	6,131	14.0	4,103
1930	415,151	9,558	22.7	5,451	12.9	4,107
1935	415,151	8,848	21.3	6,238	15.0	2,610
1940	444,500	8,704	19.6	6,583	14.8	2,121
1945	435,900	9,853	22.6	5,069	11.6	4,784
1950	450,000	8,834	19.6	5,082	11.3	3,752
1955	453,900	8,100	17.8	4,752	10.5	3,348
1956	444,800	8,212	18.5	4,632	10.4	3,580
1957	440,100	8,459	19.2	4,899	11.1	3,560
1958	436,200	8,263	18.9	4,818	11.0	3,445
1959	433,800	8,365	19.3	4,821	11.1	3,544
1960	433,900	8,736	20.1	4,737	10.9	3,999
1961	416,500	8,806	21.1	4,989	12.0	3,817
1962	413,900	8,636	20.9	4,594	11.1	4,042
1963	412,000	8,839	21.5	5,046	12.2	3,793
1964	410,300	8,719	21.3	4,717	11.5	4,002
1965	406,800	8,447	20.8	4,745	11.7	3,702
1966	402,900	8,316	20.6	5,083	12.6	3,233
1967	398,500	7,997	20.1	4,345	10.9	3,652
1968	390,700	7,630	19.5	4,811	12.3	2,819
1969	385,900	7,173	18.6	4,829	12.5	2,344
1970	383,600	6,916	18.0	4,718	12.3	2,198

TABLE 8

Detailed List Nos.	Sites	Males	Females
	<b>Buccal Cavity and Pharynx</b>		
140	Lip	—	—
141	Tongue	—	—
142	Salivary gland	1	—
143	Gum	—	—
144-145	Mouth	3	—
146-149	Pharynx	5	3
	<b>Digestive Organs and Peritoneum</b>		
150	Oesophagus	9	11
151	Stomach	61	48
152-153	Intestines	37	62
154	Rectum	19	22
155-156	Biliary Passages and liver	8	10
157	Pancreas	25	19
158	Peritoneum	1	1
159	Other digestive organs	1	3
	<b>Respiratory System</b>		
160	Nose, nasal cavities, etc.	1	2
161	Larynx	5	3
162	Trachea, bronchus and lungs	188	26
163	Other respiratory organs	1	—
	<b>Bone, Connective Tissue, Skin and Breast</b>		
170	Bone	2	3
171	Connective and other soft tissue	—	—
172-173	Skin	4	6
174	Breast	3	86
	<b>Genito-Urinary Organs</b>		
180-182	Uterus	—	34
183	Ovary, Fallopian tube and broad ligament	—	26
184	Other female genital organs	—	3
185	Prostate	30	—
186	Testis	4	—
187	Other male genital organs	—	—
188	Bladder	26	5
189	Other urinary organs	6	3
	<b>Other and Unspecified Sites</b>		
190	Eye	—	—
191	Brain	6	7
192	Other parts of nervous system	3	2
193	Thyroid gland	—	1
194	Other endocrine glands	—	—
195-199	Other Sites	10	19
200, 202, 203, 208, 209	Neoplasms of lymphatic and haematopoietic tissues (exclusive of Hodgkin's Disease, leukaemia, etc.) (201, 204-207)	7	16
	<b>Totals</b>	<b>466</b>	<b>421</b>

Deaths from certain communicable diseases from 1890

**TABLE 9**

Year	Meningo- coccal infections	Dysentery	Measles	Polio- myelitis	Whooping cough	Influenza
1890	—	—	378	—	292	—
1895	—	—	197	—	109	—
1900	—	—	42	—	115	—
1905	—	—	227	—	24	—
1910	3	—	504	—	259	—
1915	39	—	177	0	134	—
1920	4	1	132	0	84	243
1925	0	0	167	0	99	84
1930	—	0	6	—	65	38
1935	0	0	251	2	22	65
1940	22	0	150	1	54	161
1945	2	1	10	4	26	16
1950	5	0	5	11	16	32
1955	5	3	2	0	10	34
1956	10	1	0	1	6	27
1957	0	0	2	2	1	63
1958	1	1	0	0	5	13
1959	3	3	1	0	7	40
1960	0	2	0	1	0	8
1961	0	0	2	3	0	124
1962	2	1	0	0	3	16
1963	1	0	0	1	0	20
1964	1	0	0	1	1	5
1965	2	0	2	0	0	4
1966	2	0	1	0	1	106
1967	2	2	2	0	4	8
1968	3	2	1	0	2	18
1969	1	1	1	0	1	35
1970	4	0	1	0	0	75
Average Annual Deaths 1960-69	1.4	0.9	0.9	0.6	1.2	33.6



Notifications of certain communicable diseases from 1900

TABLE 10

Year	Dysentery	Food poisoning	Gastro-enteritis	Infective hepatitis	Measles	Polio-myelitis	Scarlet fever	Ty-phoid fever	Whooping cough
1900	—	—	—	—	—	—	658	1,777	—
1905	—	—	—	—	—	—	650	631	—
1910	—	—	—	—	—	—	734	95	—
1915	—	—	—	—	—	1	1,994	49	—
1920	—	—	—	—	—	1	1,939	210	—
1925	—	—	—	—	—	0	1,657	143	—
1930	—	—	—	—	—	9	1,132	32	—
1935	—	—	—	—	6,203	22	3,394	117	337
1940	—	—	—	—	5,062	2	1,266	17	701
1945	—	—	—	—	1,702	20	768	14	603
1950	35	55	377	28	4,209	109	1,668	5	1,078
1955	401	29	689	65	4,328	1	791	23	1,460
1956	198	31	412	166	1,797	9	540	8	790
1957	269	18	410	112	4,109	141	492	4	119
1958	310	24	430	83	280	11	384	2	1,132
1959	278	27	450	179	4,731	11	506	10	721
1960	276	58	455	296	487	3	519	0	88
1961	232	40	420	132	3,976	13	306	0	74
1962	326	35	401	71	1,535	5	194	0	635
1963	199	42	324	155	2,989	0	193	0	95
1964	183	10	411	265	1,904	0	402	0	223
1965	378	10	343	224	1,678	3	374	2	321
1966	300	10	475	71	1,422	1	186	0	221
1967	134	6	602	142	2,096	0	276	0	135
1968	279	17	634	426	1,243	6	424	1	301
1969	401	34	828	303	1,752	3	320	1	217
1970	159	35	831	104	2,383	0	129	1	103
Average Annual Notification 1960-69	271	26	489	209	1,908	3	319	1	231

NOTES:—

Measles – up to 30th June, 1968, notifiable only as the first case occurring in a household within a period of two months.

Whooping Cough – up to 30th June, 1968, notifiable only as the first case occurring in a household within a period of three months.

— means not available or not then notifiable.

# RAINFALL IN MILLIMETRES

TABLE 11

Month	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
January	111.8	93.2	46.0	51.1	137.9	84.6	113.0	149.8	125.1	99.1
February	102.4	52.3	73.9	17.0	19.0	178.1	82.3	58.1	98.0	130.1
March	35.6	51.3	91.7	98.6	116.8	121.2	72.4	98.7	62.9	101.6
April	113.3	56.6	64.5	46.5	94.0	114.3	79.8	49.4	71.4	109.9
May	99.1	56.9	85.6	57.2	82.6	87.6	107.2	79.2	122.8	36.7
June	51.8	40.4	110.2	70.9	107.4	114.0	46.2	57.4	66.5	42.8
July	47.7	57.2	76.5	42.9	88.6	48.5	91.4	61.5	64.0	95.3
August	79.2	135.1	95.3	92.7	107.4	88.4	119.4	72.0	42.8	127.9
September	110.2	154.8	62.5	105.7	81.3	94.5	142.0	126.1	36.9	143.4
October	108.7	56.9	120.9	142.5	95.0	139.4	157.0	139.3	57.3	117.3
November	70.1	105.7	187.5	88.9	148.6	129.8	119.1	108.5	96.9	135.3
December	89.7	101.6	21.8	143.5	169.2	192.3	113.5	76.3	112.5	49.2
	1019.6	962.0	1036.4	957.5	1247.8	1392.7	1243.3	1076.3	957.1	1186.6



## COMMUNICABLE DISEASES

The majority of the notifiable infections in 1970 had an incidence lower than the 10 year average, in spite of civil disturbances and floods. The most notable exception was gastroenteritis, where the number of cases notified (831) exceeded the record total of 828 in 1969. Although many infants admitted to the Fever Hospital with a diagnosis of gastroenteritis were found to be constipated, there were still too many admitted in a seriously ill condition, collapsed and dehydrated, so much so that in 18 cases it was impossible to save their lives.

Notifications of food poisoning totalled 35 compared with 34 in 1969. One general practitioner notified 14 cases which included two families of three persons and five persons. In both of these incidents, bacteriological investigations revealed no pathogens. Two more of this doctor's patients claimed that their illness was due to a surfeit of rhubarb and one other case claimed being ill. Investigation of 16 notifications resulted in positive results as follows —

Salmonella muenster	..	..	..	..	..	6 cases
Salmonella typhimurium (type 12a)	..	..	..	..	..	2 cases
(type 1a)	..	..	..	..	..	1 case
Untypable	..	..	..	..	..	4 cases
Salmonella Group B	..	..	..	..	..	1 case
Salmonella Heidelberg (imported cases)	..	..	..	..	..	2 cases

Two of the *Salmonella muenster* cases believed that chicken sandwiches were the cause of the illness. An employee, aged 74, in the cafe which sold the sandwiches was found to be a carrier of *S. typhimurium*. Swabs taken from various articles and surfaces in the cafe were negative.

## Immunisation

Facilities for routine immunisation procedures continue to be provided at child health centres and schools and by general practitioners. The overall result is that only 60% of children have immunisations, according to the department's records. This understates the position as the majority of schools have child populations of whom over 90% are immunised. Exceptions to this general statement occur in the extent of smallpox and measles immunisation: parents are completely uninterested in these immunisations as are many general practitioners. A weekly clinic is available at Lincoln Avenue for persons travelling abroad. Here a wide range of immunisations and combinations of immunisations is available.

*Immunisations at Travellers Clinic, Lincoln Avenue for 1970*

Yellow Fever	..	..	..	..	..	..	814
Smallpox	..	..	..	..	..	..	408
Cholera	..	..	..	..	..	..	575
T.A.B.	..	..	..	..	..	..	211
T.A.B. and Cholera	..	..	..	..	..	..	152
T.A.B. and Tetanus	..	..	..	..	..	..	95
Tetanus	..	..	..	..	..	..	8
Typhus	..	..	..	..	..	..	24
Polio	..	..	..	..	..	..	9
						Total	2,296

## Rehousing for Medical Considerations

The Health Department undertakes the allocation of points for medical considerations in the housing schemes. In 1970, over 800 cases were dealt with. The procedure is that the applicant for rehousing submits a certificate from his doctor or hospital consultant which states the medical conditions which are claimed to be adversely affected by the applicant's present housing. Normally the information supplied is so scanty that an interview and inspection is necessary. Applicants are frequently not at home and revisits have to be made in over 50% of cases. It is obvious that some doctors supply these certificates on request and without any consideration of the purpose for which they are to be used.

The medical officer undertaking this work was placed at times in most distressing circumstances when he arrived to find the patient dead or dying. Other cases were certified to be suffering from "sweating", "corns", "varicose veins" and, in one case, "infertility"—all conditions difficult to relate to adverse housing circumstances. However, there are many cases suffering from physical handicaps (especially chronic bronchitis with obstruction to breathing) where it was most gratifying to be able to recommend an improvement in their environment by rehousing. Naturally, in the welter of sensational publicity about housing conditions in Belfast, no mention is made of the amount of good which is being done in providing improved living conditions for these very many handicapped people.

Episodes of civil unrest invariably resulted in a flood of certificates from the affected area, claiming "anxiety neurosis" or "depression" as grounds for priority housing. Visiting in these areas is difficult; the medical officer is often faced with the pathetic pleading of parents and children who have not had adequate sleep for weeks or months and at the same time—often in the same family—have been subjected to abuse and threats from teenage and young adult hooligan elements.

### **Port Health**

The medical aspects of Port Health have changed considerably in recent years. The number of infected ports has fallen and hence also the necessity of medical inspections aboard ships from foreign ports. In contrast, the number of persons referred for surveillance under the Immigration Acts, especially those relating to long stay immigrants, has increased. In Belfast these are mainly students, Health Service personnel and Chinese employed in the catering trades. It was noted that documentation of health examinations and smallpox vaccinations before departure is well improved. Again, surveillance is requested for all persons coming to this area from infected countries if they do not carry the relevant vaccination certificates. Here, it is usually found that the travellers have in fact been vaccinated but that the certificates have been lost, or are out of date or not properly completed and authenticated.

### **Handicapped Drivers**

Privileged parking facilities are provided in the City for handicapped drivers. In this scheme, the department's doctors have to certify that the claimant is suffering from a severe physical disability affecting his mobility. The great majority of these applicants are very genuine cases, the main causes of physical handicap being arthritis of the legs, paraplegia and severe injuries acquired on active service or in transport accidents.

W. J. McLEOD, M.D., D.P.H., D.P.A., Ph.C.,

*Deputy Medical Officer of Health*

## Smallpox Vaccination

**TABLE 12**

	Under 2 years	2 and under 5 years	5 and under 15 years
Primary	569	367	99
Revaccination	—	19	296

## Immunisation against other diseases

*(completed primary courses – under 19 years of age)*

**TABLE 13(a)**

Disease	Year of Birth					Others under age 19	Total
	1970	1969	1968	1967	1964/66		
Diphtheria	185	2,346	719	155	857	68	4,330
Whooping cough	183	2,314	702	142	112	17	3,470
Tetanus	185	2,346	721	160	871	253	4,538
Polio	158	2,252	690	253	834	80	4,267

*(Reinforcing doses)*

**TABLE 13(b)**

Disease	Year of Birth					Others under age 19	Total
	1970	1969	1968	1967	1963/66		
Diphtheria	6	61	121	58	2,553	69	2,868
Whooping cough	4	56	110	49	410	34	663
Tetanus	6	63	125	61	2,585	474	3,314
Polio	2	80	169	73	2,425	280	3,029

## REGISTRATION OF BIRTHS, DEATHS AND MARRIAGES

Statistics for this service, operated by the Health Department, were first published in the Annual Report for 1969. The figures for 1970 show little change in respect of births and deaths from those of 1969. R.C. marriages registered are up by 11% and stillbirths are down by 10%. For the first time, the number of certified copies issued in a year reached nearly 57,000.

Marriage notices taken increased over 1969 by 15% and marriages performed in the Register Office by nearly 33%.

### Figures for 1970

Registration of Births, Deaths, R.C. Marriages and Stillbirths:—

	<i>Births</i>	<i>Deaths</i>	<i>R.C. Marriages</i>	<i>Stillbirths</i>
All areas	11,813	5,368	1,442	181
Belfast City	10,117	4,576	1,109	160
Belfast Rural	6	334	297	2
Castlereagh Rural	1,690	458	36	19

Certified copies issued: Full – 25,590; Short birth – 31,250

Marriage Register Office:—

Notices of marriage taken	—	1,319
Marriages performed	—	501
Marriages attended	—	76



# REPORT OF THE CHIEF PUBLIC HEALTH INSPECTOR FOR 1970

## *General*

While civil unrest still over-shadowed much of the work of the Department, the problems of homeless people and relief centres were not of the same magnitude as in 1969. Nevertheless other side effects of the unrest presented public health problems not likely to be encountered in normal times. Vacated houses subjected to much vandalism and used as dumping grounds for rubbish, etc., caused many complaints to the Department regarding offensive smells, rat infestation, use by vagrants, danger of fire and use by children making play grounds of the premises. In Redevelopment Areas where demolition did not keep pace with the vacation of houses, similar types of complaints were constantly received. Reference is made, in the section of this Report which deals with food inspection, to action taken to deal with food rendered unfit as a result of bomb damage and fire raising.

Perhaps, however, the major public health problem during the year arose from the severe flooding in August. The South Division of the City was most severely hit with the West Division fairly badly affected. Almost 2,000 houses were inspected throughout the City and, remarkably, only twelve were considered to have been rendered uninhabitable and incapable of being made fit at reasonable cost. Over 1,100 houses were flooded to depths varying from a few inches to five feet. Immediate assistance was given by the Army, voluntary bodies and our Welfare and Surveyor's Departments. Our own staff dealt with large numbers of complaints of rodent and insect infestations, offensive smells, dampness, etc. More than 3 cwt. of poison bait was laid in dwelling houses, vacant houses, vacant land and river banks. 125 houses were disinfested of cockroaches and flooded areas and rivers were sprayed with insecticidal spray. Every house in the areas in which there was a wooden floor was inspected to see if there was flood water under the floor boards. Over 100,000 gallons of disinfectant were issued to householders; schools, church halls, etc., used for storage of water-damaged floor coverings and furniture were fumigated. Advice was given regarding the best methods of helping to dry out the houses. One unfortunate feature was that, while remedial measures could deal with structural damage, household effects were completely ruined in many instances.

## *Staff Matters and Pupil Training*

The results of the final year examinations did not produce the hoped for successes, with only one pass out of four in June and one further pass in the re-sit examination in November. Because of failure after two attempts we had to discontinue the pupilage of two students. Three new Inspectors were appointed following press advertisements and one Inspector resigned on taking up an appointment outside public health work. The Public Health Inspectorate is still seriously undermanned and this was particularly felt during the problems arising from civil unrest, the severe flooding and increased duties in enforcement of new legislation.

## *Food Inspection and Food Hygiene*

New legislation dealing with compositional standards and labelling requirements of several foods came into force during the year and food sampling was carried out to ensure compliance with all the prescribed standards as part of the general system of consumer protection. Details are given in the Report of the many tons of food and thousands of tins of food rendered unfit as a result of flood damage. A table in that section of the Report, listing foreign matter found in food, makes interesting reading.

## *Meat and Poultry Inspection*

The two poultry slaughterhouses in the City are under constant surveillance and approximately 50,000 birds were inspected during the year with 1.5% of the birds condemned as being unfit. Close liaison is maintained with the City Meat Plant and with constant inspection of the retail meat trade, catering establishments and meat products manufactories, strict control is maintained over the City's meat supplies.

## *Air Pollution*

Europe's Conservation Year gave much-needed publicity to the problem of pollution in general and re-awakened interest in atmospheric pollution in particular. While much can be done to deal with smoke emission, problems of SO<sub>2</sub> emission, pollution from road vehicles and fume emissions from domestic central heating still remain. An exciting new development proposed for one of the City's Redevelopment Areas is district heating, which will be the first of such systems in the Province.

## *Factories, Offices and Shops*

The recent legislation providing the same safeguards of health, safety and welfare for those employed in offices and shops, as has been in force for many years for factory employees, is beginning to produce the desired results. A great deal of data regarding enforcement of this new legislation is contained in the relevant section of this Report.

## *Rodent and Insect Pest Control*

Splendid work was carried out by this section during the August flooding, often under extremely difficult circumstances. Information given in the report relating to the work of this section reveals a significant increase in the number of premises treated for rat infestation. While one hesitates to refer to an increase in the rat population, undoubtedly riot damaged property, incomplete demolition in Redevelopment Areas and the numbers of vacant properties which have become dumping grounds, all permit egress of rats from the drainage systems and harbourage, resulting in many complaints of infestations and calls for assistance.

## *Port Health*

Reference is made to the considerable expansion in seaborne traffic, particularly with regard to oil tankers now that the oil refinery is in full production. Container traffic continues to develop at a rapid rate and as someone said "the docks area looks more like a railway goods yard".

## *Acknowledgments*

Again it is my pleasure to acknowledge the co-operation and assistance given by the several Corporation Departments associated with our work and the advice and guidance always readily available from Officers of the Ministry of Health and Social Services. I also thank the Senior Officers of the Atmospheric Pollution, Housing, Port Health, Factories and Shops, Food and Drugs and Pest Control Sections of the Department for their contributions to this Report, the Administrative Officer for his editorial assistance and the clerical staff of the Sanitary Branch for collection and compilation of the statistical data.

## **Sewerage, Sewage Disposal, Land Drainage and River Works**

(This information is supplied by the City Engineer and Surveyor and the extract quoted below is taken from his Annual Report for 1970 on the work of his Department. The extract refers to works in which the Health Department has an interest.)

The culverting of the Farset River at Bombay Street has been completed and work is well advanced in the culverting of Ballymurphy Stream and Brianville Stream. A tender has been accepted and work should commence early in the New Year on the construction in tunnel of the  $\frac{3}{4}$  mile, 5 ft. internal diameter extension of the High Level Intercepting Sewer between the intersection of Argyle Street and Ashmore Street and the Falls Road near Broadway. Plans are nearing completion for the laying of a pumping main to connect this sewer with Glenmachan Street Pumping Station and to provide sewage pumping at the Station. It is anticipated that tenders for this work and also for the Kinnegar Sewage Disposal Works, the construction of storm overflows at Fort Street and Gortfin Street and the reconstruction of portion of the Stranmillis Embankment sewer will be invited and work commenced during the coming year.

The roads and sewers for the development of the Balmoral Industrial Estate and also the second and third stages of the development of the Bog Meadows, which includes the provision of sewers, the piping and diversion of streams and the continuation of Boucher Road towards Stockman's Lane, are substantially completed. Plans are being prepared for other river improvement schemes and next year it is hoped that tenders will be invited and work commenced on the culverting of the Clowney River between Islandbawn Street and Iveagh Street, the Farset River at the rear of Cupar Street and the Milewater River between Alexandra Park and North Queen Street. Road reconstruction schemes included the completion of the widening of Upper Library Street, the major portion of the Shore Road realignment at Skegoneill Avenue and the letting of a contract for the widening of Millfield. Design work proceeded for the improvement of Old Hollywood Road and other schemes.



## Refuse Collection and Disposal

During the year approximately 3,600 tons of household refuse, 490 tons of trade refuse and 630 tons of street sweepings were collected weekly and disposed of at Duncrue Street Tipping Ground. Approximately 1,500 gullies per week also received attention. The Motor Vehicles and Refuse (Disposal) Act (N.I.), 1969, became law and 308 abandoned cars were removed and several open spaces where dumping had taken place were cleared. In addition, it is estimated that 200 tons per week of rubbish were deposited by the public in the several cleansing depots during the summer months.

## Water Supplies

The Department works in close co-operation with the Water Commissioners and, with interchange of information regarding results of sampling and reference to the Commissioners of any complaints of taste, odour, discolouration and presence of foreign bodies, satisfactory control is maintained over the City's water supply. The tables which follow also show sampling of private supplies used in mineral water manufacture and in both public and private swimming pools.

### *Water samples collected by Health Department staff from consumers' taps*

During the year the total number of samples thus taken was 304. Of this number 246 were reported to be highly satisfactory and the remaining 58 were unsatisfactory. The results of the unsatisfactory samples are as follows:—

**TABLE B1**

Coliform organisms (per 100 ml.)	Samples	Coliform organisms of faecal origin (per 100 ml.)	Samples
1 – 3	46	1 – 3	4
4 – 10	3	4 – 10	—
Greater than 10	9	Greater than 10	1

5 samples contained both faecal and non-faecal coli.

### *Water samples collected by Health Department staff from consumers' taps in tenements*

In all 335 samples were taken for bacteriological examination and of these 287 were reported to be highly satisfactory: 48 were unsatisfactory because of the presence of coliform organisms.

### *Samples of water from mineral water manufacturers*

74 samples of mains water were taken for bacteriological examination and of this number 60 were highly satisfactory. 14 were unsatisfactory due to the presence of coliform organisms. 6 samples were taken from private supplies in use for manufacturing purposes and all were found to be satisfactory.

### *Domestic supplies from wells and springs*

There were 61 samples taken of which 19 were satisfactory. The remaining 42 samples had coliform organisms of faecal and non-faecal origin. 29 of these samples had more than 10 organisms per 100 ml. of water.

## Swimming Baths

### *Enclosed swimming baths*

In Belfast there are seven enclosed swimming pools. Four of these are owned by the Corporation, one is at Methodist College, one at Royal Belfast Academical Institution and one at Fleming Fulton Special School. During the year there were 577 inspections of these baths and 893 tests made for pH and chlorine residual. In 53 instances the water was above or below the agreed standards and remedial measures were instituted. Out of a total of 261 samples taken for bacteriological examination, 15 were unsatisfactory and the controlling bodies of the relevant ponds were notified. Defects found during inspections were notified to those responsible for the pools.

*Open-air swimming ponds*

At present, there are five open-air ponds in the City. Two are owned by the Corporation and two are at public schools (one of which is not in use). The fifth is at a special school. Inspections during the year at these ponds totalled 72 and 106 tests were made for pH and chlorine residual. Samples taken for bacteriological examination totalled 38 and of these four were unsatisfactory. In fourteen cases out of the 106 tests for pH and chlorine residual the water was not in compliance with agreed standards. Those responsible for the ponds were informed of the unsatisfactory results, and also of defects found during routine inspections.

**Housing Acts (N.I.) 1890-1967**

In January, survey of Redevelopment Area 11 was completed and this was followed by survey of Areas 12 and 13 (Shankill Road). These areas are bounded by Shankill Road, Townsend Street, Divis Street, Falls Road, Cupar Street and Canmore Street and comprise 2,868 dwellings with a resident population of over 7,600. The houses within the areas were built between 1852 and 1894, except for some Corporation flats in Carlow Street which are of comparatively recent construction.

Later on in the year a crash programme was embarked upon, entailing survey of Redevelopment Areas 12, 13, 24, 25 and 35 and the Inspectorate strength of the Housing Division had to be raised from 3 to 10 with an appropriate increase in clerical staff. The survey work was interrupted by the heavy flooding in the City during August, when all the Inspectorate were engaged in assessing the damage caused by the flooding. A Vesting Order and Unfitness Order enquiry was held for Area 10, which had been represented in the previous year. Public Health Inspectors gave evidence as to the fitness or otherwise of the houses in this area. Towards the end of the year survey was commenced of Areas 16, 20 and 21 (Sandy Row) and these areas comprise 2,400 houses. In the areas surveyed, the age and condition of the property is such that the dwellings are long overdue for redevelopment. Very few of the houses have such facilities as baths, hot water supply, internal W.C's. or sufficient kitchen accommodation for the cooking, storage and preparation of food. The fabric of most of the structures was badly worn and dilapidated and demolition and replacement with more modern dwellings is the only possible solution.

The Housing Section also dealt with many Closing Orders for individual houses and there were many more requests for inspection of houses offered to the Corporation for acquisition in advance of redevelopment.

By the end of the year there was considerable discussion on the probability of new legislation coming into force dealing with improvement areas and grants for providing modern amenities in houses. There are many houses in the City in good structural condition without these amenities and, if they were provided, these houses would afford good living conditions for many years to come.

During the year 447 new dwellings were completed in Area F1. 95 of these dwellings were in Divis Tower and the remainder in three-level deck-access blocks with links between each block. Divis Tower has proved popular with small family units of adults but this block and the link block of flats and maisonettes have suffered from much vandalism and considerable money had to be spent on making good the damage. The aftermath of the unrest of the previous year caused delay in rehousing in the Redevelopment Areas, as many of the new dwelling units available had to be allotted to families rendered homeless and who had been placed in temporary accommodation.

*New houses completed*

(i) Private							
Under construction	..	..	..	..	..	..	362
Completed	..	..	..	..	..	..	146
(ii) Corporation/Housing Trust							
Houses	..	..	..	..	..	..	426
Flats and maisonettes	..	..	..	..	..	..	309
Old peoples' dwellings	..	..	..	..	..	..	91

*Conversion/Improvement schemes*

Reports re standard grants	..	..	..	..	..	..	406
Reports re improvement grants	..	..	..	..	..	..	180

*Individual unfit houses*

Closing Orders..	..	..	..	..	..	..	29
Demolition Orders	..	..	..	..	..	..	Nil

*Discretionary points system for allocation of houses on medical grounds*

Applications received	..	..	..	..	....	..	84
Assessed by the Medical Officer of Health..	..	..	..	..	..	..	68

*Rent and Mortgage Interest (Restrictions) Acts (N.I.) 1920 – 1961*

## (a) During 1970:—

Certificates and reports outstanding at 1.1.70	..	..	..	..	3
Applications for certificates and reports	..	..	..	..	61
Certificates issued to tenants	..	..	..	..	53
Reports issued to landlords	..	..	..	..	3
Certificates refused	..	..	..	..	1
Reports refused	..	..	..	..	2
Applications for certificates and reports cancelled	..	..	..	..	4
Certificates and reports outstanding at 31.12.70	..	..	..	..	1

## (b) Totals from 1st September, 1951 until 31st December, 1970:—

Applications for certificates and reports	..	..	..	..	43,953
Certificates issued to tenants	..	..	..	..	30,348
Reports issued to landlords	..	..	..	..	7,524
Certificates refused	..	..	..	..	530
Reports refused	..	..	..	..	5,184
Applications for certificates and reports cancelled	..	..	..	..	366

**Public Health Nuisances**

The severe flooding in August and its aftermath caused many complaints from mid-summer to the end of the year. Liability for abatement of nuisances arising from the flooding was not readily understood and much tact and understanding were required to have necessary works carried out. Keeping inhabited, worn-out houses wind and water tight, to provide some sort of tolerable living conditions, is still a major problem and the cause of constant representations by owners, alleging unnecessary expenditure having regard to the probable life of the property. Frequent requests are made for action under the Housing Acts to close such houses. The urgent demands for re-housing associated with re-development areas, urban motorway, road widening and closure of temporary and emergency housing make it impossible to accede to all these requests. Our demands for repairs in such instances are kept to the reasonable minimum but the position becomes steadily more acute and nothing short of major redevelopment will meet the situation.



*Nuisances complained of and discovered*

**TABLE B 2**

Nuisance	Totals
Drains, traps, etc., foul or defective	3,321
Tiling, paving or flooring defective	1,454
Sinks defective or want of: wastepipes foul or defective	279
Waterclosets foul or defective: no water closet accommodation: soil or ventilation pipes defective or want of	2,636
Dustbins defective or want of	226
Roofs defective	5,927
Spouting defective or want of	4,929
Damp state	11,187
Plaster on walls or ceilings defective	2,219
Domestic water supply: want of or unsuitable	93
Lighting or ventilation insufficient or want of	355
Schools overcrowded	—
Dwelling houses overcrowded	20
Accumulation of manure and offensive matter: offensive smells: premises or passages dirty	1,208
Fowl or animals kept so as to be a nuisance	22
Schools dirty or defective	4
Miscellaneous	6,878
Total	40,758

*Abatement of nuisances in dwelling houses etc.*

**TABLE B 3**

Work carried out	
Drains, traps, etc., cleansed, repaired or relaid	2,269
Tiling, paving or flooring repaired or relaid	1,211
Sinks provided, renewed or repaired: wastepipes cleansed or repaired	269
Water closets or soil or ventilation pipes provided, cleansed or repaired	2,152
Dustbins provided or renewed	178
Roofs repaired or renewed	4,431
Spouting cleansed, repaired or provided	3,971
Damp state abated	9,046
Plaster, wood sheeting, etc., on walls and ceilings repaired or provided	1,860
Suitable domestic water supply restored or provided	16
Sufficient natural light or ventilation restored or provided	356
Overcrowding abated in schools	—
Overcrowding abated in houses	—
Houses or passages cleansed or had offensive matter removed	553
Keeping of animals so as to be a nuisance discontinued	3
Schools cleansed or repaired	2
Miscellaneous nuisances abated	4,590
Total	30,907

*Summary for 1970 in connection with defects in dwelling houses*

Nuisances complained of and discovered	..	..	..	40,758
Inspections	..	..	..	68,790
Statutory notices issued	..	..	..	14,387
Sanitary improvements carried out	..	..	..	30,907
Summonses for non-compliance with notices	..	..	..	1,107
Magistrates' Abatement Orders obtained	..	..	..	309
Summonses for disobedience of Magistrates' Orders	..	..	..	72
Fines imposed	..	..	..	£834.12.6
Costs awarded	..	..	..	£133.18.0

*Memoranda to other Departments, etc., in connection with complaints*

Estates Department	..	..	..	..	1,389
City Surveyor's Department	..	..	..	..	1,007
Water Commissioners	..	..	..	..	661

*By-Laws relating to keeping water closets supplied with sufficient water for flushing*

Inspections during the year	..	..	..	..	1,248
Notices issued	..	..	..	..	588
Summonses	..	..	..	..	61
Fines imposed	..	..	..	..	£209.0.0
Costs awarded	..	..	..	..	£21.12.0
Continuing offences	..	..	..	..	11
Fines in respect of continuing offences	..	..	..	..	£60.0.0
Costs in respect of continuing offences	..	..	..	..	£4.2.0

*Buildings used for public entertainment*

Buildings used for public entertainment were inspected during the year and air and temperature tests taken in cinemas, theatres and dance halls to check the efficiency of the ventilating and heating systems. At the same time inspections were carried out under the Food Hygiene Regulations, the Office and Shop Premises Act and the Public Health Acts on the storage, hygiene and handling of foodstuffs, the welfare of persons employed and the general sanitation of the premises. Attendances in cinemas and dance halls were much below average and at no time were crowded conditions found. During the year three cinemas and three dance halls were closed.

The following are details of the work carried out in this connection:—

Cinemas and theatres:—

Number in the City	..	..	..	..	20
Inspections	..	..	..	..	120
Tests	..	..	..	..	37
Kata thermometer readings	..	..	..	..	184

Dance halls:—

Premises licenced for public dancing	..	..	..	30
Inspections	..	..	..	24
Tests	..	..	..	9
Kata thermometer readings	..	..	..	45

There were 26 written and verbal notices to owners and occupiers for the following contraventions:—

Temperatures too high	..	..	..	..	1
Insufficient air movement	..	..	..	..	2
Ventilation inadequate ..	..	..	..	..	2
Public health nuisances	..	..	..	..	11
Food storage facilities not satisfactory	..	..	..	..	1
Floors and walls not maintained ..	..	..	..	..	3
Washing facilities not satisfactory	..	..	..	..	3
Passageways not properly lighted	..	..	..	..	2
Stairways without suitable handrails	..	..	..	..	1
No first-aid equipment ..	..	..	..	..	2
No thermometers	..	..	..	..	1
Unclean conditions	..	..	..	..	2

*Belfast Corporation Act 1930, Section 44 (provision of dust-bins)*

Notices requiring provision of dust-bins	..	..	..	41
Summonses for non-compliance with notices	..	..	..	2
Dust-bins provided following complaint to the Department	..	..	..	178

*Drain testing*

Tests on complaints of rats ..	..	..	..	..	566
Tests on other complaints ..	..	..	..	..	282
Defects found by colour tests	..	..	..	..	8
Defects found by smoke tests	..	..	..	..	248
Defects found by water tests	..	..	..	..	Nil
Length in feet of drain pipes laid in relaying drains	..	..	..	..	304

*School Buildings*

Inspections of schools, etc. ..	..	..	..	..	149
Complaints received from School Health Division	..	..	..	..	1
Intimation notices concerning defects sent to					
(a) Director of Education	..	..	..	..	7
(b) Managers of Voluntary Schools	..	..	..	..	1
Sanitary improvements carried out	..	..	..	..	2

*Other premises and locations*

Stabling yards (21 on register at 31.12.70)						
Inspections	..	..	..	..	..	46
Anti-fly treatments	..	..	..	..	..	36
Burial grounds						
Inspections	..	..	..	..	..	35
Public sanitary conveniences						
Number in City	..	..	..	..	..	64
Inspections	..	..	..	..	..	822
Offensive trades (hide merchants, etc.)						
Number in City	..	..	..	..	..	7
Inspections	..	..	..	..	..	1



Hairdressers							
Registered at 1st January, 1970	..	..	..	..	..	..	502
Registered during the year	..	..	..	..	..	..	19
Deleted during the year	..	..	..	..	..	..	15
Registered at 31st December, 1970	..	..	..	..	..	..	506
Inspections	..	..	..	..	..	..	474
Common lodging houses							
Inspections	..	..	..	..	..	..	1
Tipping grounds							
Inspections	..	..	..	..	..	..	32
Rivers and streams							
Inspections	..	..	..	..	..	..	539
Samples of water collected	..	..	..	..	..	..	84
Infectious diseases							
Visits following	..	..	..	..	..	..	755

### ATMOSPHERIC POLLUTION

This year has seen a renewed awakening of interest in the degree of control over pollution, not only of the air but also of rivers, sea, beaches and land. This was the result of the European Conservation Year which aimed to bring home to the man in the street the damage being done to our environment. Very wide publicity was given to all aspects of pollution, and in England a lead was given by the setting up of the Department of the Environment so that immediate attention could be given to issues of policy and priority. Attention was focused on all forms of air pollution; not only by domestic and industrial smoke and gases, but also from motor vehicles and exhaust from jet aircraft, especially in close proximity to airfields. On the local front, talks, displays and film shows were organised and a very successful exhibition was staged at Queen's University. It is hoped that some of this publicity will have fallen on good ground and become imprinted on the minds of a large number of the population, so that whether as householders or industrialists they, when considering the combustion of material either for heat or by incineration, will be mindful of the welfare of others.

As air pollution knows no bounds, more and more people are thinking about it and it is gratifying to note that our city planners are involved in a proposal to have one central boiler house to heat the redevelopment in the Cullingtree Road/Divis Street area. District heating from one central boiler house efficiently run is the answer to the multiplicity of small chimneys (even if they are burning smokeless fuel) and would be the ideal solution in mixed commercial and residential development in urban renewal areas.

Pollution from road vehicles still causes much criticism but the control of air pollution from this source is an exceptionally complicated matter. For diesel engines a new British Standard has been agreed between the Ministry of Transport and the diesel engine manufacturers for new engines and it is hoped that in due course still further reductions may be made in the intensity of smoke emitted from compression ignition engines. For the internal combustion engine, the Ministry of Transport in England are shortly to lay before Parliament statutory regulations to require that all new vehicles sold in this country are fitted with a simple "breathing" device to take crank-case emission of hydrocarbons and partly burnt fuel back into the air intake of the cylinders. This, it is claimed, will reduce the emission of unburnt hydrocarbons by approximately 25% to 30% and also reduce smell. It is the Government's aim to progressively reduce, and where possible to eliminate, harmful substances in vehicle exhausts. This will take many years, and in the meantime there will be a steady tightening of standards of pollution control. Surveys of vehicle exhaust fumes have been carried out in a number of places, and these reports in the main conclude that there are no harmful effects to health in this country from normal exposure to traffic fumes in the open streets. Vehicle exhaust fumes are, however, a frequent source of complaint and may be regarded as sufficiently detrimental to the amenities to merit economically practicable measures to minimise them.

The increasing number of domestic heating installations using 35 second fuel oil produce numerous complaints from occupiers of adjoining dwellings (and in some cases from the occupiers themselves) regarding the fumes and noise from these plants. This is most annoying to householders who may

have spent large sums of money converting from open coal fires on the understanding that they will be smokeless and trouble free only to find within a short time they are being warned by officers of the Department about pollution. This question is at present receiving attention from the major oil companies and although better regulation of burners to improve combustion is being pursued, this is not the complete answer. Within limits of boiler size, local authorities have no control over the height of chimneys or type of boiler installed in domestic premises and installations are made daily without any consultation with the local authority. It is only when trouble arises and complaints are made to this Department that it is found that the flue pipe terminates below a bedroom window or something of that nature, or the boiler is situated in a lean-to adjoining the main building. Some control, either by by-law or extension of the Clean Air Act, is required to enable local authorities to exercise control over these installations by approval before installation, so that chimney height, type of burner, grade of fuel oil and noise level can be properly considered.

The programme of introducing smoke control areas continues and two areas were brought into operation during the year. Smoke Control Area No. 7, bounded by Royal Avenue – North Street – Peter’s Hill – North Boundary Street – Denmark Street – Clifton Street and Donegall Street and covering 51 acres, was approved by the Ministry of Health and Social Services and came into operation on 13th April, 1970. This area, which is detached from the existing Nos. 1 and 2 areas, brings smoke control into the central area of the City and was chosen because the major part is being re-developed and a large area of the Shankill Road to the West is also to be re-developed and fitted with smokeless appliances. Conversions were carried out in 27 dwellings, the majority of which installed gas heating. 186 other premises, which were mainly commercial, required few conversions as very little bituminous coal was being burned.

The other area was Smoke Control Area No. 3 which was an extension of Nos. 1 and 2, and covered 95 acres bounded by Ainsworth Avenue – Shankill Road – Canmore Street – Falls Road and Springfield Road. This was the largest number (2,410) of premises of any area yet introduced, of which 2,241 are dwelling houses. The houses in this area are all of the older terrace type and a high percentage of the occupants are pensioners who qualified for 100% grant. A large number of the tenants in this area converted to gas fires, probably due to pressure from a highly organised team of salesmen from the Gas Department who were in the field early. That gas has proved so popular is also probably due to the pleasing appearance of the modern gas fire and its ease and cleanliness of operation.

In the four areas now in operation there was little opposition to the idea of clean air, which has proved to be quite popular: indeed there are many enquiries from various parts of the City as to when smoke control will be extended to them, as the demand for a higher standard of comfort and clean heating increases.

*Work done in connection with air pollution in 1970*

Timed observations	..	..	..	..	..	113
Minutes of dark and black smoke emitted	..	..	..	..	..	84
Average minutes of dark and black smoke emitted per observation						0.74
Verbal notices given	..	..	..	..	..	38
Statutory notices served	..	..	..	..	..	5
Plant inspections and advisory visits	..	..	..	..	..	449
Complaints investigated	..	..	..	..	..	70
Number of inspections re smoke control areas	..	..	..	..	..	9,925
Number of factory chimneys	..	..	..	..	..	400

## Location of atmospheric pollution recording sites

### (a) *Health Department*

- |                        |                                   |
|------------------------|-----------------------------------|
| 1. Ormeau Avenue       | 10. Balmoral Avenue               |
| 2. York Road           | 11. Ballymurphy                   |
| 3. Forfar Street No. 1 | 12. Mountcollyer Street           |
| 4. Forfar Street No. 2 | 13. Lowwood Park                  |
| 5. Northern Road       | 14. Queen's Bridge                |
| 6. Grove               | 15. Dufferin Road                 |
| 7. College Street      | 16. Forfar Street                 |
| 8. Templemore Avenue   | 17. St. Aidan's, Springfield Road |
| 9. North Road          |                                   |

### (b) *Queen's University, Belfast*

18. Royal Victoria Hospital

### (c) *Belfast Corporation Electricity Department*

- |                          |                                  |
|--------------------------|----------------------------------|
| 19. Sydenham Airport     | 24. Madrid Street                |
| 20. Duncrue Street       | 25. East Bridge Street           |
| 21. Great Patrick Street | 26. Victoria Works, Queen's Road |
| 22. Skegoneill Street    | 27. Thompson Dock, Queen's Road  |
| 23. Park Avenue          |                                  |

Due to changes required by the Atmospheric Pollution Division of the Warren Spring Laboratory the analysis of deposited matter and lead peroxide recordings of sulphur are now reported in a different form from previous years, and the 12 months are divided into winter and summer periods. This necessitates the last 3 months of 1969 appearing with the first 9 months of 1970.

### Deposited Matter

(Milligrammes per square metre per day)

TABLE B 4

Station	MONTH												6 Months Winter Average	6 Months Summer Average	Yearly Average
	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.			
1	106	129	112	127	169	235	306	207	243	146	185	158	146	208	177
2	933	256	188	166	279	425	331	269	273	304	236	255	375	278	326
3	102	161	134	159	145	180	191	343	174	175	132	96	147	185	166
4	39	692	105	130	165	145	100	88	667	206	218	464	213	291	252



**Sulphur determination by lead-peroxide method (SO<sub>2</sub> per 100 sq. cm. per day)**

*(a) Stations maintained by Health Department*

**TABLE B 5**

Station	MONTH												6 Months Winter Average	6 Months Summer Average	Yearly Average
	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.			
3	0.04	1.55	3.90	2.75	2.00	1.94	1.30	1.00	1.10	0.60	1.00	1.00	2.03	1.00	1.51
4	1.04	1.52	1.60	1.83	1.48	1.07	0.80	0.80	0.70	0.40	0.30	0.80	1.42	0.63	1.03
5	4.50	4.90	4.45	6.85	1.80	2.04	1.50	2.30	5.30	0.40	2.10	7.20	4.09	3.12	3.61
6	1.16	1.25	2.66	2.87	1.87	0.76	1.20	0.30	0.60	0.80	0.40	0.80	1.76	0.72	1.25

*(b) Stations maintained by Belfast Corporation Electricity Department*

**TABLE B 6**

Station	MONTH												6 Months Winter Average	6 Months Summer Average	Yearly Average
	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.			
19	4.1	5.4	3.5	3.5	4.7	2.7	2.0	2.6	1.9	2.1	1.4	3.2	4.0	2.2	3.1
20	1.7	2.1	4.2	6.0	1.8	1.3	1.4	1.3	1.8	0.8	1.0	1.2	2.8	1.2	2.1
21	1.2	2.1	2.4	2.0	2.0	1.7	1.5	1.2	1.0	0.3	0.9	0.8	1.9	0.9	1.4
22	1.0	1.3	2.1	3.3	1.1	0.8	1.0	0.6	0.8	0.4	0.5	0.8	1.6	0.7	1.1
23	0.8	1.8	1.7	1.5	1.8	1.8	1.4	0.7	0.5	0.5	0.6	0.6	1.6	0.7	1.1
24	1.2	2.7	2.7	2.6	2.9	2.4	2.1	1.3	1.0	0.8	1.1	1.0	2.4	1.2	1.8
25	0.8	1.4	1.3	1.2	1.4	1.2	1.1	0.9	0.6	0.5	0.7	0.8	1.2	0.8	1.0
26	2.1	3.8	2.2	1.9	3.3	2.7	2.2	1.8	0.7	0.5	0.8	0.8	2.7	1.1	1.9
27	2.1	3.5	4.4	3.0	3.0	3.1	2.5	1.2	1.2	1.2	1.2	1.2	3.2	1.4	2.3

**Daily volumetric instrument (station 18) maintained by Queen's University, Belfast**

*(Concentration in ug. per cubic metre)*

**TABLE B 7**

Month	Smoke		SO <sub>2</sub>	
	M.A.	H.D.A.	M.A.	H.D.A.
January	160	490	132	373
February	143	505	176	398
March	85	257	143	297
April	72	218	125	285
May	59	158	130	267
June	29	87	95	215
July	28	92	89	226
August	54	160	73	209
September	53	130	117	234
October	72	221	107	207
November	133	350	151	295
December	123	388	158	327



Daily volumetric instruments maintained by Health Department  
(Concentration of smoke and sulphur dioxide in ug. per cu. m.)

TABLE B 8

STATIONS

Month	7				8				9				10				11				12				13				14				15				16				17			
	Smoke		SO <sub>2</sub>		Smoke		SO <sub>2</sub>		Smoke		SO <sub>2</sub>		Smoke		SO <sub>2</sub>		Smoke		SO <sub>2</sub>		Smoke		SO <sub>2</sub>		Smoke		SO <sub>2</sub>		Smoke		SO <sub>2</sub>		Smoke		SO <sub>2</sub>		Smoke		SO <sub>2</sub>					
	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr	ma	hdr				
January	129	591	243	556	257	1217	170	452	108	346	106	349	133	514	74	176	128	384	133	273	242	681	206	482	129	522	130	425	175	288	128	332	146	632	178	523	240	772	93	270	142	262	104	167
February	178	590	207	748	219	651	76	370	97	229	100	220	91	297	71	229	75	200	70	226	169	550	135	407	78	211	71	181	138	304	112	215	149	380	155	304	168	512	94	258	61	157	76	172
March	104	259	173	425	147	326	156	301	61	167	93	194	40	162	43	142	38	105	55	151	85	285	89	277	43	153	46	197	100	246	104	257	83	175	118	279	89	235	64	121	47	144	43	125
April	84	403	157	403	119	248	129	309	37	56	67	89	37	116	45	102	63	150	56	122	96	251	104	228	76	233	58	181	70	149	66	173	64	164	106	309	99	239	64	143	57	158	54	97
May	39	84	124	297	70	161	97	199	18	47	44	87	35	89	50	173	47	97	58	136	90	485	86	282	26	62	48	92	70	167	87	248	50	160	145	401	60	167	50	94	39	77	55	110
June	33	87	99	207	40	100	88	211	15	36	51	301	27	74	53	171	49	141	64	128	25	50	64	140	21	71	45	65	56	147	98	245	40	84	109	257	47	137	65	121	29	58	63	142
July	25	47	56	115	47	80	53	146	17	34	30	61	17	55	26	66	30	86	44	104	32	67	47	86	13	29	27	176	37	94	78	107	29	52	47	75	31	68	40	98	—	—	—	—
August	30	45	78	172	47	141	15	41	53	155	23	56	38	78	22	56	42	67	64	140	33	107	62	89	17	30	43	67	55	145	75	129	28	49	54	124	26	79	56	136	—	—	—	—
September	49	90	74	149	61	88	64	99	36	63	29	65	27	63	29	47	66	131	45	98	66	156	72	153	32	93	46	129	31	76	39	93	50	91	52	111	65	96	46	90	47	94	66	165
October	77	223	114	218	101	246	105	194	48	135	57	153	38	116	43	96	72	166	56	162	112	195	115	195	53	111	70	136	69	250	72	176	60	135	66	160	82	181	64	154	32	153	67	204
November	147	247	192	374	219	400	171	325	99	187	85	161	69	155	59	124	122	216	94	160	76	244	206	318	110	216	89	184	158	304	135	248	122	180	124	248	178	527	73	153	95	198	86	190
December	177	573	186	384	206	496	166	401	107	283	117	234	72	322	64	175	126	651	72	209	185	349	147	339	101	316	102	235	133	382	134	288	132	331	117	261	168	747	67	235	134	568	83	214

ma—Monthly Average. hdr—Highest Daily Reading.

Heaviest Pollution

Smoke—Templemore Avenue—January 8th: 1217 ug. per cu.m.

SO<sub>2</sub>—College Street—February 27th: 748 ug. per cu.m.

Lightest Pollution

Smoke—Lowwood Park—July 16th: 2 ug per cu.m.

SO<sub>2</sub>—North Road—August 5th: 5 ug. per cu.m.

## PORT HEALTH

There has been considerable expansion in the seaborne trade during the past 10 years, particularly with regard to oil tankers. Prior to the completion of the oil refinery, all oil products were imported by coastal tankers which discharged at the oil jetties at Airport Road West. Now refinery products are loaded outward as exports, the main import being crude oil carried by super tankers from Persian Gulf ports, discharged at the new oil refinery wharf. Similar tankers and bulk carriers of equal capacity now arrive in ballast at the Belfast graving dock for repairs and refit. The deep water wharf at the West Twin silo accommodates very large bulk grain carriers many of which arrived during the year.

The increase in the number and size of container ships, including purpose built vessels, has required considerable reconstruction of wharves, adjacent land areas and approaches and the creation of new and development of existing cargo handling facilities. For instance, additional office accommodation and a marshalling yard and compound, complete with mechanical facilities for cargo handling and storage, have been provided at the Herdman Channel. Until three years ago the Belfast/Preston ferries were berthed at Pollock Basin East, vehicles being discharged through stern openings on to a pontoon-borne ramp. Insufficient space for working and parking vehicles, trailers and containers eventually dictated the need for a larger reception area at Herdman Channel, comprising a four acre quay area and compound, fully equipped to handle over 200 containers. One of the larger vessels which makes three ferry calls weekly can accommodate 130 vehicles and 140 containers, in and out daily. In an adjacent berth similar facilities are provided to handle the extensive trailer container service with Garston, in which, initially, a purpose built cellular vessel provided a thrice weekly service: this has now been augmented by the addition of a similar vessel to provide a daily service.

There are now over 100 container and ferry sailings involving 5,000 containers in and out of the Port weekly from seven drive on and container berths connecting with Ardrossan, Heysham and Liverpool from Donegall Quay; with Liverpool from the Ballast Quay and Spencer Basin East; Preston and Garston from Herdman Channel; Heysham from the Gotto Wharf. Containers from cross channel and European ports are discharged at Pollock, York and Dufferin Docks and Stormont wharf. It is expected that unit load traffic will exceed  $1\frac{1}{2}$  million tons annually, or 65% of the general cargo handled at the Port (not counting bulk cargoes such as grain, coal, oil and timber).

H.M. Customs and Excise have approved Dufferin Dock No. 3 for the purpose of Customs examination of all goods imported in secure containers, which originally landed at other ports and subsequently transhipped to Belfast. The increase in container importation from foreign sources has created the necessity for Customs clearance at Belfast instead of at the port of entry into the United Kingdom. The discharge of flour and poultry meal, arriving from Birkenhead by cross-channel coasters, into sheds at Clarendon Dock has been transferred to York Branch Dock North as a new car park was needed for the extension of the Belfast Harbour Commissioners Offices. The new vessel *Supremity* has commenced sailings between Belfast and Sweden, mainly in timber and wood products with additional general cargo, a trade which has been uninterrupted since the 1880's. The vessel has special stowage facilities and handling equipment for container carriage.

A number of people found gathering shellfish on the Co. Down foreshore of Belfast Lough, within the area of the Belfast Port Health Authority's jurisdiction, were found guilty of contravention of the Belfast Corporation Act 1930. That part of the foreshore extending from Lowwood to Whitehouse, from which, in the past, shellfish were gathered illicitly, has now been completely covered to a considerable depth with hard filling in preparation for the M2 approach road, thereby greatly reducing the foreshore area and making it less attractive to bathers.

Following an outbreak of smallpox in the North Rhine and Westphalia districts of Germany, crew members of German vessels or others which had, during the voyage, called at German ports, were kept under observation during their stay in the port and were notified of the availability of vaccination. Following notification from cross channel airport health authorities of crew members (mainly Asiatic) who had disembarked from Eastern countries and were in transit to Belfast to join vessels here, routine contact was maintained with them until the vessels sailed. A number of crew members of vessels in port were vaccinated against smallpox and cholera on request. Specimens of faeces from crew members of a vessel in which several cases of intestinal illness occurred during the voyage, did not, on bacteriological examination, reveal the presence of intestinal pathogens and no further similar illness occurred among the crew during the vessel's stay in port.

Interim rodent eradication treatment was applied by local contractors to 18 vessels where infestation was slight, not widespread and confined mainly to cargo spaces, deck stores, etc. Where considered necessary the Port Health Authorities at the next United Kingdom port of call were notified



of our action and resultant kill (if any). Insect infestation, mainly of steam-flies and to a lesser extent house flies, was sufficiently extensive in 23 cases to necessitate disinfestation by insecticidal spray or powder in galleys, pantries, lockers and provision stores. Fumigation with methyl bromide of cargo spaces was necessary in two cases to eradicate cargo-borne insect infestation.

Following complaints of smell resulting from the degassing of an oil tanker at the Belfast Graving Dock, observations were made at various points in the Harbour Estate and for some distance beyond. No offensive odour was detected by these observations.

Areas of reclaimed ground, both completed and in "lagoon" state, were kept under frequent observation. The nature of tipping and filling material, the condition of surfaces, deposits of material and accumulations of water on the surfaces or in choked drainage trenches were noted: all of these indicated potential sources of offensive smells. The foreshores on both sides of Belfast Lough were also visited at all levels of the tide, including stream and river outlets and industrial and sewage effluent outfalls.

Emissions of black smoke were noted on a number of occasions from the chimney of a furnace which was being used partly as an incinerator and complaint was made to the plant foreman and boiler-man, following which the emissions were reduced. Other instances of black smoke arose from the burning of waste oil and rubbish in open areas: this was immediately stopped.

Public toilets and urinals in the Harbour Estate and the passenger terminals on Donegall Quay, Herdman Channel and Gotto Wharf were frequently inspected and found to be clean and in good decorative and structural condition. All notified defects were promptly remedied.

During the dockers' strike a considerable number of large vessels — mostly ore carriers — lay at anchor off Bangor. These vessels were victualled and watered by locally owned tugs, from which samples of drinking water were taken in the course of routine inspection.

Spillage of concentrated nitric acid from a damaged tanker on board a coastal vessel caused damage to consignments of flour and packaged and canned foodstuffs. Flushing by hoses, necessary to dilute the acid, caused it to spread and created fumes. Scorching and tainting were evident on packages and cans, with the likelihood of corrosion and later perforation. Doubtful and damaged goods were disposed of by tipping.

Foodstuffs in containers, either directly imported or transhipped from foreign or cross channel ports, were inspected and samples taken where the contents were available. The required documentation was checked and receiving authorities elsewhere in Northern Ireland were notified by telephone with subsequent written confirmation and assurance that the container remained unopened until final destination.

All direct importations of Chinese and other Oriental foodstuffs were examined on landing and kept under observation whilst in dockside sheds and samples were taken for chemical analysis and bacteriological examination.

The Food Hygiene (Docks, Carriers, etc.) Regulations (N.I.) 1970 came into operation, in part, on 1st July, 1970, the parts requiring structural alterations, provision of water supply, washing facilities, etc., being deferred until January, 1971. The Regulations deal with consignments of foodstuffs handled, conveyed and stored at wharves and dockside sheds and at premises such as warehouses, carriers stores, cold stores, etc., not included in the Food Hygiene (General) Regulations (N.I.) 1964. The application of the Regulations is determined by the nature of packing and methods of handling the foodstuffs. To prevent risk of contamination during discharge, movement, storage or conveyance of food, berths, sheds or other premises must be suitably situated, of sound construction and in a clean condition. All vehicles and containers are to be sound and clean and, where intended for use in the conveyance of open food, the interiors are to be flush lined in metal. Equipment used in handling, such as trays, nets, slings, hooks and cloths, are to be in sound and clean condition and capable of being so maintained. Those handling foodstuffs which are not so wrapped or packed as to preclude risk of contamination must keep as clean as may be reasonably practicable all parts of their person which are liable to come into contact with the food: clothing and protective covering are to be kept clean: thorough hand washing, waterproof covering of hand cuts and abrasions and prohibition of smoking and spitting are also prescribed. Where carcase meat, either uncovered or lightly wrapped (such as frozen lamb and mutton enveloped in lightly woven cotton mutton cloth) is handled, those so engaged are required to wear clean washable protective clothing, including neck and head covering. They are also required to give immediate notice to their employers on becoming aware that they are suffering from or have become carriers of certain infections capable of being transmitted in food and so causing serious intestinal illness. Food buildings must be maintained in good structural, decorative

and cleanly state. Adequate and suitable sanitary conveniences, hot and cold running water, washing facilities and first aid dressings must be provided for those engaged in food handling. The regulations also require prevention of rodent and insect infestation, the provision of properly constructed covered refuse receptacles which must be emptied and cleansed at least once daily, the construction and siting of stored water supplies for flushing purposes, correct siting of drain inlets, adequate lighting and ventilation and cleanliness of sanitary conveniences and notices requiring users of lavatories to wash their hands. Where compliance with the provisions in the Regulations relating to drain inlets, intervening ventilated spaces, water supplies and washing facilities cannot be reasonably met the premises or places concerned may be exempted from the particular provisions.

The *Icenic*, *Imperial Star*, *Dorset*, *Paparoa* and *Port Caroline* arrived from New Zealand with large consignments of frozen boneless beef, lamb and mutton carcasses and edible offals. Australian and New Zealand frozen meat in insulated containers was transhipped at English ports for delivery to Belfast by cross channel coastal vessels. A consignment of 543 tons of local boneless meat was exported by M/V *Port Bernie* to Nova Scotia.

The total of imports and exports for 1970 was 6,964,000 tons, (the largest to date), including "unit-load" traffic 1.6 million tons, grain 1.1 million tons, oil 2.0 million tons. Imports totalled 5,826,000 tons and exports 1,137,000 tons.

Regular contact was maintained with the officers of the Landing, Shipping and Waterguard branches of H.M. Customs and Excise, the Home Office Immigration Branch, the Marine Survey Branch of the Board of Trade, the Portal Inspection branch of the Ministry of Agriculture, the Belfast Harbour Commissioners, the Belfast City and District Water Commissioners and the Harbour Masters of Bangor and Carrickfergus, all of whom have been most helpful and co-operative.

*Vessels built by Harland and Wolff Ltd. in 1970*

La Pampa	Single screw bulk carrier	Gross tonnage	17,180
Bulk Eagle	Single screw bulk carrier	Gross tonnage	17,180
Esso Ulidia	Single screw turbine tanker	Gross tonnage	126,538
Sydney Bridge	Single screw bulk carrier	Gross tonnage	35,868
Rudby	Single screw bulk carrier	Gross tonnage	57,204

*Vessels inspected during refit or repair*

Liners:-	Southern Cross.
Cargo vessels:-	Alaric, Ballyedward, Ballyhaft, Ballyhill, Ballylesson, Ballyloran, Ballymena, Ballyrory, Ballyrush, Barbara Bolton, Bison, Brian Boroime, Carrigan Head, Clan Graham, Clan Ranald, Clan Robertson, Clarkeden, Container Venturer, Destrehan, Divis, Fair Head, Fallowfield, Forthfield, Fraternity, Glengyle, Grimaldi, Helenus, Herbert Maccauley, Hollybank, Houston City, Indian Renown, Joan Maru, Jason, Mangelia, Marietta Bolton, Mastro Stelios, Mystic, Mitra, Myrtlefield, Naess Trader, Neereide, Owerri, Peleus, Perseus, Port Bernie, Port Glade, Prometheus, Ranella, Raphael, Roonagh Head, Selby, Silversea, Strangford Ferry, Toddalsfjord, Topmost 16, Torr Head, Tuscany, Tuskar, Union, Vauban, Wanby, Wirral Coast.
Tankers:-	British Gannet, British Guardsman, British Ivy, British Power, British Unity, Methane Princess, Methane Progress.
Cross-channel passenger/vehicle/cargo vessels:-	Duke of Argyll, Duke of Lancaster, Duke of Rothesay, Ulster Prince, Ulster Queen.
Naval:-	H.M.S. Kilmorey, H.M.S. Tongham.
Royal Fleet Auxiliary Vessels:-	Dewdale, Robert Dundas.
Tugs:-	Carrickfergus, Clandeboye, Coleraine, Cultra, Dunosprey.



# Amount of shipping entering the port in 1970

TABLE B 9

	Number	Tonnage	Number inspected		Number recorded as defective	Ships on which defects have been remedied	Ships reported as having had infectious disease on board during the voyage
			By Medical Officer	By Port Public Health Inspectors			
COASTWISE: Steam } Motor }	5,693	5,060,896	6	1,301	93	87	5
FOREIGN: Steam } Motor }	1,342	2,029,533	18	1,220	32	27	1
TOTALS	7,035	7,090,429	24	2,521	125	114	6

Included in the above table are arrivals at Bangor, Carrickfergus and Kilroot.

## Character of trade at the port

(a) *Passenger traffic (other than coastwise) during the year:—*

TABLE B 10

Passengers	Aliens		British including Commonwealth		Total		Refused leave to land/embark
	Forces	Civilians	Forces	Civilians	Forces	Civilians	
Inwards by ship	—	318	—	224	—	542	3
Inwards by aircraft	—	1,589	—	14,197	—	15,786	—
TOTALS	—	1,907	—	14,421	—	16,328	3
Outwards by ship	—	97	—	119	—	216	—
Outwards by aircraft	3	2,724	87	15,722	90	18,446	—
TOTALS	3	2,821	87	15,841	90	18,662	—

(b) *Cargo traffic:—*

Principal Imports:—Maize; wheat; barley; oats; flour; butter; fresh, dried and canned fruits; meat and meat products; tea; sugar; fish; vegetables; eggs (frozen and powdered); confectionery; chocolate; desiccated coconut; wines; ales; spirits; cordials; carobs; grain offals (bran, middlings, pollards, etc.); cattle, pig and poultry feedstuffs; hides (cured); timber; wood-pulp; paper; newsprint; flax; hemp; coir; sisal; rayon fibre; fabrics and made-up articles; soap; chemicals; drugs; phosphate rock; chemical fertilizers; crude and refined oils; coal; coke; crude rubber; duralium; tin plate; iron; steel; brass; copper and other alloys; machinery; tools; motor vehicles; building materials; tar; asphalt; cement; tobacco (leaf and manufactured); cigarettes.

Principal Exports:—Confectionery; chocolate; milk (preserved and condensed); eggs; bacon; pork; beef; poultry; rabbits; hares; fresh fish; shellfish; potatoes; apples; pears; grass seed; live cattle, sheep and pigs; hides (wet); feedstuffs; rock salt; machinery; rope; twine; felt; linen; textile yarns; fabrics and made-up goods; scrap metal; oil; motor spirit; tobacco (manufactured); cigarettes; whiskey.

(c) *Foreign ports from which ships arrived:-*

TABLE B 11

Aahus	9	Dordrecht	1	Lagos	11	Rio de Janiero	1
Aalesund	1	Durban	8	La Pallice	1	Rio Grande	1
Aarhus	7	East London	2	Larvik	4	Rochfort	1
Abidjan	2	Emden	5	Las Palmas	8	Ronnskar	1
Adelaide	2	Esbjerg	3	Le Havre	17	Rotterdam	155
Akrehamn	1	Essider	1	Leningrad	2	Rouen	37
Albany	1	Famagusta	16	Le Treport	8	Saint John N.F.	5
Algiers	2	Floro	1	Libourne	1	Saint Nazaire	1
Amsterdam	57	Fortune N.S.	2	Limassol	5	Salvador	1
Amuay Bay	1	Fosnabaag	1	Livorno	1	Sana Pola	1
Antwerp	55	Fredericia	1	Lorient	2	San Sebastian	2
Archangel	11	Frederikshavn	1	Lubeck	1	Santander	1
Arica	1	Freetown	2	Luderitz	1	Santos	1
Ashdod	7	Fremantle	2	Lysekil	2	Sarpsborg	1
Auckland	2	Gambleby	1	Madras	2	Sas Van Ghent	8
Baie Comeau	2	Gdansk	4	Malmo	3	Savannah	1
Baltimore	2	Gdynia	3	Maloy	1	Seven Islands	1
Bangkok	1	Gefle	1	Malta	1	Singapore	2
Bayonne	45	Ghent	36	Mannheim	1	Skagen	4
Bedi Bunder	1	Gibraltar	1	Mantyluoto	6	Skaw	3
Beira	9	Gothenburg	44	Maricaibo	1	Sonderborg	1
Beirut	1	Goto	1	Marin	1	Sorrel	3
Bermuda	1	Grundvik	1	Mauritius	1	Stavanger	2
Bhavnagar	1	Halifax N.S.	2	Mina-Al-Ahmadi	1	St. Johns, N.B.	5
Bilbao	2	Halmstad	5	Mobile	1	St. Malo	5
Bombay	5	Halso	1	Mombasa	7	Stocka	4
Bonnières	2	Halstavik	3	Montreal	20	Stockvik	1
Bordeaux	16	Hamburg	32	Moss	4	Strangnas	1
Boston	1	Hamilton	3	Mostaganem	1	Suelgen	1
Bremen	7	Hamina	7	Naantali	2	Swinoujscie	1
Breskens	2	Hango	3	Nantes	1	Sydney	1
Brest	1	Harbour Grace	1	Napier	1	Szczecin	7
Bridgewater	2	Hasum	1	Nassau	1	Takoradi	1
Brighton (Trinidad)	1	Haugesund	2	New Orleans	1	Tampico	1
Brussels	5	Haukipudas	1	Newport News	6	Tanga	1
Buenos Aires	3	Helsingborg	1	Norfolk, Va	5	Tanza	1
Bunbury	1	Helsinki	4	Norkopping	6	Taranto	1
Buras	1	Heroya	1	Novorossisk	4	Tema	1
Cabadelo	1	Hirtshals	3	Nykoping	2	Terneuzen	3
Caen	4	Hommelvik	2	Odense	5	Thorlakshof	1
Calcutta	2	Honfleur	7	Olafsfjord	1	Three Rivers	5
Callao	1	Hong Kong	4	Oran	2	Thunder Bay	2
Capelle	1	Houston	4	Oslo	11	Timaru	3
Capetown	14	Hunnebostrand	2	Otterbacken	2	Toledo	2
Cartagena	1	Husnes	3	Panama	1	Tonnay Charente	3
Chalna	1	Ijmuiden	7	Papenburg	4	Toronto	6
Cherbourg	1	Isabella	1	Parrsboro	4	Uddevalla	6
Chimbote	1	Izmir	2	Pasajes	2	Valkom	2
Chittagong	1	Kakinada	2	Pastelillo	1	Valley Field	1
Civitavecchia	2	Kalamata	1	Penang	1	Valparaiso	1
Cochin	1	Kalmar	3	Philadelphia	2	Vancouver	7
Colombo	1	Kalundborg	1	Piscoli	1	Varna	1
Constanza	5	Karlsborg	1	Port Alfred	3	Vejle	1
Copenburg	2	Karlstad	6	Port Cartier	1	Vestmannaey Jar	1
Copenhagen	39	Karsar	2	Port Elizabeth	2	Vesteras	1
Cristobal	1	Keflavik	1	Port St. Joe	2	Viareggio	2
Cuxhaven	1	Kemi	1	Port Sweetenham	2	Visakapatnam	1
Dakar	6	Kharg Island	5	Quebec	4	Vlaardingen	2
Dalhousie	3	Kirkenes	1	Randers	1	Walvis Bay	6
Danzig	1	Koping	1	Rauma	3	Weymouth	1
Dar-es-Salaam	3	Korsoer	1	Rejang	1	Wimeldinge	1
Dieppe	2	Kotka	10	Reposaari	1	Ystad	1
Domsto	1	Kristiansand	2	Reykjavik	2		
		Kronvik	1	Riga	15		

**TABLE B 12**

Bahamain	1	Faroese	3	Israeli	1	Republic of Ireland	48
Belgian	5	Finnish	13	Italian	6	Russian	53
Brazilian	1	French	14	Liberian	30	Somali	1
British	1,194	German (E)	1	Nicaraguan	2	South African	8
Bulgarian	3	German (W)	403	Nigerian	5	Spanish	9
Cypriot	7	Greek	30	Norwegian	58	Swedish	33
Danish	134	Icelandic	4	Panamanian	10	Swiss	1
Dutch	442	Indian	6	Polish	18	Turkish	1

**The Aliens Order 1953 (S.I. 1671/1953)**

**The Commonwealth Immigrants Act, 1962**

Under Articles 30 and 33 of the above Order, Dr. J. McA. Taggart, Dr. W. J. McLeod and Dr. A. L. Walby have been appointed by the Ministry of Health and Social Services as Medical Inspectors for the Port of Belfast for the purposes of the Order and the Act.

Ships carrying aliens (including those granted temporary shore leave)	117 inwards; 55 outwards
Aircraft carrying aliens	176 inwards; 233 outwards
Granted temporary shore leave	77

**Water supply**

(a) and (b) for the port and shipping:—

The port fresh water supply is obtained from the Belfast City and District Water Commissioners' mains which feed the Belfast Harbour Commissioners' quayside mains and hydrants. Vessels are supplied from quayside hydrants by the use of meter/standpipes and hoses under the control of the Water Commissioners. Special precautions are taken to prevent contamination of the hydrants and ancillary equipment.

(c) *Water boats*:—

There are no water boats at the port. Local tugs supply fresh water on the rare occasions when ships are anchored off-shore.

**Water Sampling**

61 samples of drinking water were taken on board vessels and submitted to the Central Laboratory for bacteriological examination. 57 of these samples were found to be highly satisfactory: 4 were unsatisfactory due to the presence of coliform organisms. Where examination revealed contamination the ship's water tanks, pumps and systems were thoroughly flushed and chlorinated with effective results.

**Public Health (Ships) Regulations (Northern Ireland) 1954-1964:—**

*Arrangements for dealing with Declaration of Health forms:—*

Declaration of Health forms as recommended by the Association of Sea and Air Port Health Authorities of the British Isles are in use at the port. Special instructions relative to the Port of Belfast are given on the fourth page and a supply of these forms is distributed to H.M. Customs Officers and to the Belfast Harbour Commissioners for the use of the Pilotage service.

A Declaration of Health form signed by the master and countersigned by the ship's 'surgeon (where one is carried) is received from each ship arriving at the port from a foreign port. The Declaration of Health form is received by the Customs Officer or the Port Public Health Inspector on the arrival of the ship. The answers to the questions contained in the Declaration are scrutinised and supplementary questions asked. In cases where the Customs Officer first boards the ship and the Declaration of Health is satisfactory, pratique is granted. If the Declaration of Health is not satisfactory, the circumstances are immediately reported to the Port Medical Officer, who makes investigations before



passengers or crew are allowed to land. Ships arriving at the port are required to display the appropriate quarantine signals as laid down in the regulations. 609 completed Declaration of Health forms were received from vessels arriving at the port from foreign ports other than "excepted ports."

*Boarding of ships on arrival:—*

All ships arriving from a foreign port are boarded on arrival by an officer of H.M. Customs and an officer of the Port Health Authority.

*Notification to the Authority of inward ships requiring special attention (radio messages, land signal stations, information from pilots, Customs officers, etc.):—*

Arrangements for the transmission of radio messages from inward bound ships requiring special attention under the Regulations have been made with the various shipping companies and agents in Belfast. Under the arrangements the shipping companies receive the radio message required under Regulation 13 and forward the information to the Port Medical Officer. Alternatively, or in addition, radio messages are received direct by the Port Health Authority, the telegraphic address "Portelth, Belfast" having been registered for this purpose. (Regulation 14 (1) and (2)). No land signalling system is in operation. Close co-operation exists between the Port Health Authority and the Officers of H.M. Customs and notifications of ships requiring special attention are received from the latter. 39 radio telegrams were received from inward bound ships.

*Mooring stations designated under Regulations 22 to 30:—*

With the concurrence of H.M. Customs and the Belfast Harbour Commissioners, the ordinary places of mooring, discharge or loading have been designated mooring stations in relation to inward ships from foreign ports.

*Experience of working of Regulation 18: restriction on boarding or leaving ships:—*

In carrying out the provisions of this Regulation during the year no difficulty arose and it was not necessary to require passengers to furnish names and destinations, etc., as there was no case of infectious disease on board any ship arriving at the port which required this procedure.

*Arrangements made for:—*

*Regulation 5 (c) (i): Premises or waiting rooms for medical inspection—*

There are at present no premises set apart as a Customs examination hall, waiting rooms or rooms for medical inspection of passengers, as there are no direct passenger sailings between this port and foreign ports. Passengers who arrive by direct cargo ships from foreign ports are examined, if necessary, on board the particular ship.

*Regulation 5 (c) (ii): Premises for temporary isolation of persons as required by the regulations:—*

None provided.

*Regulation 5 (c) (iii): Cleansing, disinfecting or disinfection of ships, persons or clothing:—*

After the removal of a case or cases of infectious disease, disinfection of the ships is carried out by the Port Public Health Inspectors. Clothing and other effects are removed to the Health Committee's Disinfecting Station, Laganbank Road, where they are subjected to steam pressure disinfection. The cleansing of persons is also carried out at this station at which suitable facilities have been provided for this purpose.

*Regulation 5 (d): Arrangements for reception into hospital of persons as required by the regulations:—*

The N.I. Hospitals Authority make provision for the reception of cases of infectious diseases at the Northern Ireland Fever Hospital at Purdysburn. Separate premises situated in the hospital grounds, but self contained and isolated from the other hospital buildings, are available for the reception of cases of smallpox.

*Regulation 5 (e): Ambulance transport:—* The port makes use of the facilities provided for ambulance transport in the City by the N.I. Hospitals Authority.



Regulation 5 (f): Supervision of contacts:— 12 notifications regarding contacts of infectious diseases were received from other Sea and Airport Health Authorities during the year.

Regulation 9: Arrangements for the diagnosis and treatment of venereal diseases among seamen under international agreement:—

Upon the arrival of a ship in the port, the Master is informed of arrangements for the diagnosis and treatment of venereal disease amongst the seamen. Pamphlets are left which give the location and time of V.D. Clinics and warning of the danger of venereal disease. If continuation of treatment at another port is necessary, the seaman's V44 is completed by the Medical Officer of the V.D. Clinic with particulars of treatment given. The Belfast Harbour Commissioners have permitted the display in the port area of Health Department notices warning of the necessity for diagnosis and information on treatment centres.

Arrangements for interment of the dead:—  
These are dealt with by the shipping companies or their agents.

Cases of notifiable and other communicable diseases landed from ships (including coastwise ships)

TABLE B 13

Diseases	Cases		Ships concerned	Average cases for previous five years
	Passengers	Crew		
Influenza	—	2	2	4
Scabies	—	1	1	—

Cases of notifiable and other communicable diseases occurring in vessels during voyage but disposed of prior to arrival

TABLE B 14

Diseases	Cases		Ships concerned	Average cases for previous five years
	Passengers	Crew		
Dysentery	—	1	1	—
Hepatitis	—	2	2	—

No cases of cholera, plague, relapsing fever, smallpox, typhus fever or yellow fever occurred and no plague infected rats were discovered during the year.

Other illnesses which occurred in vessels during voyage or stay in port

TABLE B 15

Illness	Foreign-going	Coastwise
Appendicitis	2	1
Bronchitis	2	2
Burns	1	—
Cardiac trouble	1	—
Dental	11	3
Disc lesion	1	—
Ear trouble	—	1
Epididymitis	1	—
Eye infection	1	—
Gastritis	6	1
Hernia	1	—
Injury	14	2
Laryngitis	—	1
Nephritis	3	—
Nervous debility	1	—
Pleurisy	1	—
Rheumatic	3	1
Venereal disease	4	—
Verruca	1	—

## Measures against rodents

### *Steps taken for detection of rodent plague:—*

On ships in port:—All ships arriving from ports where plague is endemic are boarded by the Port Public Health Inspector as soon as possible after berthing. Enquiries are made as to the prevalence of rats on board, and as to whether any sick or dead rats were found during the voyage. The ships are then inspected to ascertain the degree of rat infestation, and are periodically inspected during the time they remain in port in order to ascertain if any dead rats have been found in the cargo.

### *Measures taken to prevent the passage of rats between ship and shore:—*

If a vessel shows evidence of rat infestation or has come from a suspected port, rat guards have to be fixed and maintained fixed to all mooring lines during the time the vessel is in port. Other measures to prevent passage of rats over gangways, etc., may be required. Particular attention is paid to accumulations of materials likely to attract rats, such as galley swill deposited on decks or jetties and not contained in tightly-covered metal receptacles.

### *Methods of deratting:—*

(a) On ships:—Eradication measures in a vessel are influenced by the extent and location of the infestation. Where it is slight and confined, trapping and warfarin baiting will suffice. In other cases fumigation with hydrogen cyanide is carried out by authorised contractors in accordance with the provisions of the Hydrogen Cyanide (Fumigation of Ships) Regulations (Northern Ireland) 1952 under the supervision of the Port Public Health Inspectors. Methyl bromide may be used as an alternative fumigant, particularly where insect infestation is also present. Sodium mono-fluoroacetate (1080) in fluid form, may be used in poison baiting.

(b) Premises in the vicinity of docks, quays, etc.:—Sheds, wharves, roads and open spaces in the Belfast Harbour Commissioners' Estate receive routine warfarin baiting. Occupiers of premises within the Estate readily accede to requests for provision of rodent repressive treatment at their premises. When necessary a written notice under the Rats and Mice (Destruction) Act, 1919 is served on the occupiers of the premises concerned.

### *Measures taken for detection of rats:—*

(a) On ships:—Vessels arriving in the port are inspected by the Port Public Health Inspectors and Pests Officer to ascertain the presence and extent of rodent infestation or any condition which would encourage infestation.

(b) On shore:—Sheds, stores, other buildings and structures also timber stacks and open spaces receive continual inspection.

#### Inspections made by Pests Officer:—

Vessels .. .. .	915
Vessels — for issue of deratting exemption certificates .. ..	87
Dockside premises, sheds, stores, timber-stacks, building and fitting-out berths, yards and lands .. .. .	998

### *Ratproofing:—*

#### (a) *Extent to which docks, wharves, warehouses, etc., are ratproof:—*

The quayside of docks and basins in the port are mainly of solid granite construction with ferro-concrete or granite sett surfacing. In the case of jetties, wharves and quay extensions, some rat harbourage does exist in the under-jetty piling and frame work also in the stone facing of the river bank but rat passage from one to the other is restricted by the sound construction of quayside surfacing. The use of concrete and/or granite setts laid on concrete in the construction of roads and shed floors ensures effective ratproofing in sheds and other dockside buildings.

#### (b) *Action to extend ratproofing:—*

(1) In ships:—Efforts are directed towards restricting free movement in vessels and preventing access to such attractive spaces as bilges for water, under ceilings, sheathing or casing for nesting and food stores. The use of tight fitting steel doors, sheet metal and expanded fine-mesh metal assures perfect protection.

(2) On Shore:—Dock-side premises are inspected to ensure that they are maintained in sound condition against the entry and harbourage of rodents and that material favourable to harbourage and feeding is not permitted to accumulate. Most owners and occupiers of premises in the port area are fully aware of the damage to merchandise caused by rodents and adopt all practicable measures to prevent their entry.

On 12 occasions accumulations of material offering rodent harbourage were turned over, restacked or removed and ratproofing was made good in 4 cases.

*Number of rats destroyed during year*

(1) On ships:—

**TABLE B 16**

Species	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Black Brown	30 —	1 —	— —	2 —	— —	6 —	2 —	4 —	7 —	2 —	— —	4 2	58 2

In addition to the above, 53 mice were destroyed.

(2) In docks, quays, wharves, warehouses etc.:—

**TABLE B 17**

Species	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Black Brown	4 —	— 2	3 1	4 —	2 2	4 —	1 2	4 —	6 1	3 1	5 —	3 2	39 11

In addition to the above, 58 mice were destroyed.

The number of rodents destroyed in the above table were those reported to the Port Public Health Inspectors and Pests Officer, following enquiry from sweepers, storemen, pests eradicating operators, etc.

*Measures of rodent eradication on plague "infected" or "suspected" ships or ships from plague infected ports which arrived at the port during the year:—*No plague infected or suspected ships arrived at the port during the year.

*Deratting Certificates and Deratting Exemption Certificates issued during the year*

**TABLE B 18**

Net tonnage	Ships	Deratting certificates issued				De- ratting ex- emption certi- ficates issued	Total certi- ficates issued
		After fumigation with		After trap- ping, poison- ing, etc.	Total		
		Methyl bromide	Sulphur				
Under 300 tons	27	—	—	—	—	27	27
From 301 tons to 1,000 tons	27	—	—	—	—	27	27
From 1,001 tons to 3,000 tons	15	1	—	—	1	14	15
From 3,001 tons to 10,000 tons	31	—	—	—	—	31	31
Over 10,000 tons	10	1	—	—	1	9	10
TOTALS	110	2	—	—	2	108	110

18 vessels, where rodent infestation was slight, were serviced by trapping and baiting and, where deemed necessary, notification of extent of infestation was given to the Port Health Authority of the port of final discharge.



# Hygiene of crews' spaces:

Classification of nuisances:—

**TABLE B 19**

Nationality of ships	Inspected	Defects of original construction	Structural defects through wear and tear	Dirt, vermin, and other conditions prejudicial to health
British	1,194	9	102	160
Other nationalities	1,327	—	8	34

The defects found consisted of:—

**TABLE B 21**

	British	Other nationalities
<b>Defects due to wear and tear of the following:</b>		
Bilge limbers, suctions and spar ceilings	1	—
Bulkheads, shell and deck plating	2	—
Coffee, milk and tea boilers and galley equipment	4	—
Cupboards	1	—
Deckhead and bulkhead insulation	5	1
Decks	6	1
Doors	3	1
Drinking water filters	1	—
Flue pipes	3	—
Flushing valves	4	—
Fresh water systems	7	—
Fresh water tanks	1	—
Galley refuse shutes and grease traps	2	—
Galley stoves	10	—
Heating systems	1	—
Lockers	1	—
Portlights and windows	5	—
Refrigerators	14	2
Scupper pipes and fittings	4	—
Showers	2	—
Soil discharges	1	—
Tables	3	—
Tiling	9	1
Urinal discharges and stalls	1	—
Ventilators and ventilation systems	3	—
Wash basins	4	—
Waste discharges	7	2
W.C. basins	6	—
<b>Totals</b>	<b>111</b>	<b>8</b>
<b>Other conditions remedied:</b>		
Bilges cleansed and painted	6	1
Crew and passenger accommodation cleansed	21	5
Crew and passenger accommodation painted	21	5
Disinfection after infectious disease	2	—
Dockside nuisances from overboard discharges	11	5
Domestic refrigerators painted	6	2
Drinking water systems chlorinated	10	—
Drinking water tanks cleansed and cement washed	20	2
Lockers painted	1	—
Refrigerated cargo spaces cleansed	1	1
Scuppers cleansed	11	3
Serviced for insects	23	6
Serviced for rodents	12	3
Sullage tanks cleansed	6	1
Swill bins provided	3	—
W.C. basins and drains cleansed	1	—
W.C. compartments cleansed	4	—
W.C. compartments painted	4	—
<b>Totals</b>	<b>163</b>	<b>34</b>



*Action taken following discovery of nuisances or other defects in vessels:—*

It was not necessary to issue formal written notices on any occasion as in every case of verbal notice to Masters, Duty Officers, Owners, or Shipping Agents (and, where vessels were undergoing refit, Marine Superintendents and Shipyard Managers) of nuisances and other defects, remedial action followed. Nuisances and other defects arising from defects in original construction of vessels and any contraventions of the Merchant Shipping (Crew Accommodation) Regulations, 1953, were notified to the Nautical Officers of the Board of Trade, Marine Survey Branch. Berths occupied by vessels (particularly the adjoining jetty surfaces) were kept under close observation to prevent soiling of dockside surfaces and contamination of water hydrants by overside discharge of soil and waste water. The berthing masters of the Harbour Commissioners give notice to masters of incoming vessels that discharges on to quayside surfaces are prohibited and that, where accidental discharges occur, immediate cleansing and hosing down of the dockside surface is required so as to avoid contamination being carried into adjoining sheds in which foodstuffs may be stored. On 38 occasions it was necessary to require the removal of cargo spillage and rodent harbourage from dockside sheds, loading bays, container compounds and grounds.

**Food Inspection**

*Action taken under the Food and Drugs Act (N.I.) 1958 and Regulations made thereunder:—*

The following samples of food were taken and submitted to

- (a) the Central Laboratory, for bacteriological examination:—  
Desiccated coconut, 20; pate de fois truffe, 2; chopped ham with pork, 1; dates, 1; frankfurter sausages, 1; tongue pate, 1; pate with mushrooms, 1; ham pate, 1; pork luncheon meat, 1; water chestnuts, 1.
- (b) the Public Analyst for chemical analysis:—  
Desiccated coconut, 6;

and for physico/chemical analysis:— Nil.

All cargoes of foodstuffs on board vessels, in containers or stored in dockside sheds and stores were kept under continuous observation and inspected regularly for the detection of unsound food or infringements of the Regulations made under the Food and Drugs Act (N.I.) 1958.

*Shellfish:—Information respecting any shellfish beds or layings within the area under the jurisdiction of the Port Health Authority, stating whether they are, in the opinion of the Port Medical Officer, liable to pollution:—*There are no layings of shellfish within the area.

*Report of any action under the Public Health Shellfish (N.I.) Regulations 1936 or the Food and Drugs Act (N.I.) 1958:—*None taken. Under the Belfast Corporation Act 1930, it is an offence to gather shellfish within the area of the Belfast Port Health Authority. Posters are exhibited in the vicinity of the Port area, warning the public against the gathering of shellfish.

*Unsound food seized or surrendered*

**TABLE B 21**

	Tons	Cwts.	Lbs.
Boneless beef	—	7	0
Desiccated coconut	—	2	76
Lamb carcase	—	—	28
Onions	6	5	0
White sugar	4	6	0

*Dark Smoke (Permitted Periods) (Vessels) Regulations (N.I.) 1965: Smoke observations of ships' funnels—*

Number of observations each of 30 minutes' duration .. ..	9
Number observed discharging black smoke over three minutes in the aggregate during a period of 30 minutes .. ..	1
Number observed discharging dark smoke continuously for periods in excess of those permitted in the Schedule, during a period of 30 minutes .. ..	3

Verbal notice was given by the Port Public Health Inspectors to Masters, Chief Engineers and Ships' Managers on 3 occasions regarding the volume and duration of emission of black and dark smoke from ships' funnels. In every case immediate remedy was effected. Opportunity was taken during visits to vessels using steam in heating or propulsion to contact Chief Engineers with a view to preventing emission of dark smoke from funnels.

*Routine and other inspections, additional to those tabulated elsewhere in the Report:—*

- 752 visits to cross-channel passenger vessels.
- 1,582 re-inspections regarding defects, etc.
- 152 inspections regarding issue of deratting and deratting exemption certificates.

### FACTORIES, OFFICES AND SHOPS

Plans received from the City Surveyor's Department concerning alterations to existing buildings and erection of new buildings were examined and reported on as follows:—

Amusement arcades .. ..	2
Bakeries .. ..	4
Banks .. ..	8
Bookmakers' premises .. ..	2
Bread shops .. ..	3
Bus stations .. ..	2
Church buildings .. ..	2
Clubs .. ..	2
Factories .. ..	9
Fire Stations .. ..	1
Hairdressing salons .. ..	2
Health studios .. ..	1
Hospitals .. ..	4
Launderettes .. ..	6
Library .. ..	1
Mixed shops (non-food) .. ..	26
Office buildings .. ..	36
Old people's homes .. ..	1
Playgrounds .. ..	2
Schools .. ..	12
Sports pavilions .. ..	3
Railway premises .. ..	1
Warehouses .. ..	10
Welfare homes .. ..	3

In addition to the above 22 reports were made to the City Planning Officer on applications under the Planning Acts (N.I.) 1931 and 1944.

The following tables give details of work carried out during the year in enforcement of the Factories Acts:—

Factories (power) on register .. ..	2,612
Factories (non-power) on register .. ..	200
Other premises .. ..	124

TABLE B 22

Premises	Inspections	Notices issued	Occupiers prosecuted
Factories with mechanical power	2,152	105	1
Factories without mechanical power	38	2	—
*Other premises under the Act (including works of building and engineering construction, but not including outworkers' premises)	206	11	—
Totals	2,396	118	1

\* Electrical stations reckoned as factories

TABLE B 23

Defects found

Particulars	Instances	Remedied	Referred to Chief Factory Inspector	Prosecutions
Want of cleanliness (Sect. 1)	110	85	1	—
Overcrowding (Sect. 2)	—	—	—	—
Unreasonable temperature (Sect. 3)	1	5	2	—
Inadequate ventilation (Sect. 4)	1	3	1	—
Ineffective drainage of floors (Sect. 6)	—	—	—	—
Sanitary conveniences (Sect. 7)				
Insufficient	10	8	—	—
Unsuitable or defective	223	219	—	—
Not separate for the sexes	—	—	—	—
Other offences (excluding offences relating to homework, which are reported in Table B 24)	11	16	13	2
Totals	356	336*	17	2

\* Defects remedied include defects outstanding from last year

TABLE B 24

Factory Outworkers (Homework)

Nature of Work	Inspections	Outwork in unwholesome premises (Section 132)			Outwork in infected premises (Sections 133/134)		
		Instances	Notices served	Prosecutions	Instances	Orders made	Prosecutions
1. Making, cleaning, washing, altering, ornamenting, finishing and repairing of wearing apparel	—	—	—	—	—	—	—
2. Making-up, ornamenting, finishing and repairing of table linen (including in the term "linen" articles of cotton and linen mixture)	143	1	1	—	3	1	—
3. Textile weaving and any process incidental thereto	—	—	—	—	—	—	—
4. Other	—	—	—	—	—	—	—
Totals	143	1	1	—	3	1	—

Outworkers premises within the City, notified during the year	..	174
Notices sent to factories employing outworkers	..	46
Notices for failing to keep or send list of outworkers	..	5
Outworkers notified from other districts	..	1
Outworkers notified to districts outside the City	..	143



In addition to the provisions of the Factories Acts relating to Local Authority responsibilities, factories are also subject to the provisions of the Public Health Acts in so far as public health nuisances are concerned. Consequently, during visits to factories, such nuisances as damp conditions, structural defects, discharge of fumes, etc., are actioned under the Public Health Acts. Details are as follows:-

*Inspection of factories and workplaces under the Public Health Acts (N.I.) 1878 to 1926 and the Belfast Corporation Acts 1845 to 1961:-*

Nuisances discovered .. .. .	91
Statutory notices issued .. .. .	62
Nuisances abated .. .. .	69
Dangerous structures, risk of fire, etc., reported to the City Surveyor	15

**Bakehouses**

There were 188 bakehouses on the Department's Register at the end of 1970, two fewer than in 1969.

Ten bakeries closed down or ceased using the premises for baking purposes and eight new bakeries were established. 889 visits were made in connection with the Food Hygiene (General) Regulations (N.I.) 1964, the investigation of foreign matter in foodstuffs and inspections during the course of alterations and improvements in existing and new bakeries.

**TABLE B 25**

Defects	Instances	Notices	Remedied
Want of cleanliness in food rooms	13	13	10
Food rooms required redecoration	23	10	18
Ceilings, walls, floors, doors, etc., in disrepair	13	8	8
Equipment worn or defective, required repair or renewal	4	2	4
Cleanliness of machinery, tables, benches, utensils not observed	7	6	4
Sanitary conveniences so placed that offensive odours could penetrate food room	1	1	—
Unsuitable refuse containers or disposal	6	3	5
Unsuitable washing facilities for personal hygiene	11	10	12
Hygiene notices not exhibited	6	3	6
Unsuitable washing facilities for equipment and machinery	2	2	2
Suitable and sufficient ventilation of food rooms not provided or maintained	2	1	2
Walls and ceilings of cooking and food preparation rooms not capable of being readily cleansed	67	35	35
Suitable precautions not taken to prevent contamination of food by insects, dirt, animals or otherwise	31	28	27
Unsuitable first aid equipment	3	4	2
Unsuitable or no locker accommodation for outdoor clothing	8	8	6
Other defects	9	9	9
Totals	206	143	150*

\* Defects remedied include defects outstanding from last year

**Bread Shops**

Bread shops on register at 1st January, 1970 .. .. .	368
Deletions .. .. .	20
Additions (new premises) .. .. .	23
Bread shops on register at 31st December, 1970 .. .. .	371
Inspections during the year .. .. .	1,354

TABLE B 26

Defects	Instances	Notices	Remedied
Want of cleanliness in food rooms	3	3	1
Ventilation inadequate or not maintained	2	1	2
Ceilings, walls, windows, floors, doors in disrepair	—	—	1
Ceilings, walls, windows, floors, doors, etc., required cleansing	20	14	10
Suitable and sufficient washing facilities not provided	8	7	5
Food rooms required redecoration	3	3	2
No first aid equipment	3	3	3
Adequate precautions not taken to prevent contamination of food	19	27	5
Unsuitable refuse containers and disposal	3	3	3
Absence of cloakroom accommodation	1	1	1
Other defects	14	13	11
Totals	76	75	44*

\* Defects remedied include defects outstanding from last year

Bread Vans

There were 45 inspections of bread vans during the course of delivery of bread and bakers' confectionery to dwelling houses and retail shops in the City: the vans are inspected with regard to hygiene and the provision of suitable and sufficient washing facilities as required under the Food Hygiene Regulations (N.I.) 1964. Spot inspections are also made of the bread vans and bread trays during visits of Inspectors to bakeries, and frequency and methods of cleansing and sterilization are checked.

The following conditions were found:—

Uncleanliness of vehicles .. .. .	6
Unsatisfactory personal cleanliness .. .. .	2
Unsatisfactory hand washing facilities .. .. .	3
Unsatisfactory methods of cleansing vehicles .. .. .	2
Defective food trays and containers .. .. .	5

Verbal and written notices were issued to the persons responsible and in all cases improvements were effected.

All the flour and animal feeding stuffs mills in the City were inspected.

Betting and Lotteries Act (N.I.) 1957

Number of bookmakers' offices operating in the City .. .. .	109
Applications made to the Courts for certificates of suitability .. .. .	115
Number of certificates granted by the Courts .. .. .	112
Objections made on health grounds .. .. .	6
Applications refused by the Courts .. .. .	2

Two bookmakers' offices were vacated due to the City's redevelopment programme and one was damaged to such an extent during the riot troubles that re-building was necessary. Six objections on health grounds were lodged in the Courts by the Department to the granting of certificates of suitability, two applications were withdrawn, three were granted subject to an undertaking that public health requirements would be complied with and one is still pending.

OFFICE AND SHOP PREMISES ACT (N.I.) 1966  
(Annual Report for the year 1970)

The administration of the health and welfare provisions of the Act suffered to some extent from civil disturbances in the City. In the affected areas, riot damage, vandalism, loss of trade, closure of businesses, etc., all had a detrimental effect and surveys and re-inspections became increasingly

difficult and embarrassing and had to be curtailed. Added to the problems were the reluctance of owners and occupiers in the disturbed areas to effect improvements and repairs and the difficulty of securing tradesmen to carry out the work. There was the additional problem of business firms taking precautions to protect their property by sealing up windows and bricking up openings, etc., thus restricting ventilation and natural light.

### *Registration*

During 1970, 349 premises within the scope of the Act were added to the register: with 323 deletions, the total of premises on the register now stands at 5,437, an increase of 26 over 1969. Despite the obligation under Section 48 of the Act on employers to register new premises with their local authority, most of the 349 new registrations resulted from routine visits of inspectors.

### *Staff*

For better organisation, duties under the Office and Shop Premises Act have been amalgamated with those under the Factories Acts: there are now four public health inspectors who spend more than half their time on enforcement duties under the Act and another six who combine food hygiene duties with the enforcement of the Act in food premises.

Three other staff are employed for most of their time on office and shop premises work.

### *Inspection*

There were 313 general inspections (i.e., first inspections) during the year of premises within the scope of the Act. This is some 600 inspections fewer than last year but is to be expected as the complete survey of the City is approaching the end and more time is now devoted to re-visits and follow-up of contraventions discovered on previous visits. Altogether 4,959 visits were made to premises, including re-inspections: 87 plans for alteration, conversion and re-building of offices and shops were examined and reported on, with special attention to ensure compliance with the provisions of the Act. Complaints of public health nuisances were also investigated and appropriate action taken for their abatement. Inspections were interrupted for a period during serious flooding in the City, when enforcing inspectors were diverted to urgent public health duties.

### *Enforcement*

Apart from the difficulties mentioned earlier, mainly in the disturbed areas of the City, good progress and improvement in the environmental aspects of the Act continue to be made, reflected in the large number of contraventions remedied during the year. Good relations were maintained with H.M. Inspectors of Factories, who were most helpful at all times.

405 notices were served in respect of contraventions during the year. The following table gives details of contraventions included in these notices and of abatements on these and previous notices.



TABLEB 27

Particulars	Contraventions	Abatements
Cleanliness	87	104
Temperature:		
Insufficient heating provided	14	16
Thermometers not provided	226	210
No heating facilities provided	1	1
Facilities for warming not provided	1	3
Heating facilities giving off noxious fumes	1	3
Ventilation	24	24
Lighting	49	48
Seating facilities	4	5
Drinking water	3	23
Outdoor clothing facilities	14	24
Eating facilities	4	2
Sanitary accommodation:		
Unsuitable	29	34
Insufficient	13	6
Not maintained	93	107
Cleanliness	78	91
Lighting	78	80
Accessibility	4	2
Facilities for sanitary dressings	5	19
Washing facilities:		
Unsuitable or insufficient	105	38
Soap, towels, etc., not provided	1	12
Hot and cold or warm water not provided	109	187
Unclean conditions	21	20
Lighting	11	16
First aid facilities not provided	122	218
Dangerous:		
Machinery	5	9
Floors, stairways, etc.	107	118
Fittings	4	7
Abstract of the Act not exhibited	268	271
Totals	1,481	*1,698

\* Includes outstanding contraventions from previous year

*New Regulations*

The Office and Shop Premises (Hoists and Lifts) Regulations (N.I.) 1969, came into operation on 1st January, 1970, and impose requirements for the construction, maintenance and examination of hoists and lifts in office and shop premises. They also require liftways to be enclosed and fitted with suitable gates, enclosures to be so constructed as to prevent any person falling down the way or coming into contact with any moving part of the lift. Gates are to be fitted with efficient interlocking or other devices to ensure that they cannot be opened except whilst the lift cage or platform is at a landing and that the cage or platform cannot be moved away from a landing until gates are closed. The regulations also provide that every lift shall be marked with its maximum safe working load; that passenger lifts which are constructed or re-constructed after the date of the regulations shall, where the platform or cage is suspended by ropes or chains, have at least two ropes or chains separately connected to the platform or cage, each capable of carrying the whole of the maximum working load of the lift and that efficient devices shall be provided and maintained to support the platform or cage with its maximum load in the event of breakage of a rope or chain or any of its attachments. The regulations have opened up a new field of technical activity for enforcing inspectors of local authorities, and, while valuable advice was freely given by Factory Inspectors from their fund of experience gained under the Factories Acts, local authority inspectors would greatly benefit from a short course of lectures and discussions on this subject, similar to those provided in Great Britain for enforcing inspectors.

Under the regulations it is obligatory for the owner or occupier to have every lift, contained in premises to which the Act applies, examined by a competent person every six months and, if the examination shows that the lift cannot continue to be used with safety unless certain repairs are carried out, the examiner must (a) immediately or (b) within a specified time, send a copy of his report to the enforcing authority. Although the regulations have been in force for over a year, and despite the advance publicity given to them, there are still owners (particularly of Section 42 buildings)

who seem to be unaware of their obligations under the regulations. 31 reports were received in connection with the regulations, two of which were referred to the Chief Inspector of Factories. Of 29 reports dealt with by this department, there were 30 contraventions which required immediate attention, 42 contraventions where repairs were necessary within a specified time and 43 other recommendations for safety and improvement.

The importance of, and necessity for, the regulations cannot be over-stressed: indeed, two of the 29 reports contained such serious and dangerous conditions that immediate action had to be taken by this department to stop the lifts being used and, in three other instances, the owners voluntarily took the lifts out of service until the urgent repairs, necessary to make them safe, were carried out. The owners and occupiers of buildings containing lifts were generally co-operative in having repairs and improvements carried out. In only one instance is prosecution being considered. The following table gives details of the work carried out under the regulations.

**TABLE B 28**

Contraventions	Instances	Notices served
Enclosure of hoistway or liftway	7	4
Landing and cage gates	6	4
Interlocks on landing and cage gates	10	5
Other gate fastenings	3	2
Cage or platform and fittings	8	5
Cage guides, buffers; interior of hoistway or liftway	2	2
Over-running devices	1	1
Suspension ropes or chains and their attachments	18	12
Safety gear (prevention of fall of platform or cage)	5	3
Brakes	1	1
Worm or spur gearing	2	2
Other electrical equipment	16	7
Other parts of lift or cage	4	3
Other defective conditions	12	6
Maximum safe working load markings	3	3
Recommendations not included in regulations	10	5
Motor room enclosures and safeguards	7	4
Totals	115	69

*Notification of Accidents*

60 accidents were reported to this Department during the year, an increase of 10 over the 1969 figures, but the same trend is followed this year, in that only 4 of the accidents are reported from smaller firms. No fatal accidents were reported. An analysis of accidents under five headings may give a clearer picture of causes, etc.:-

(a) Persons involved in accidents

Men	..	..	..	..	..	..	..	22
Women	..	..	..	..	..	..	..	29
Boys under 18	..	..	..	..	..	..	..	3
Girls under 18	..	..	..	..	..	..	..	6

(b) Premises where accidents occurred

Offices	..	..	..	..	..	..	..	9
Shops	..	..	..	..	..	..	..	47
Wholesalers	..	..	..	..	..	..	..	2
Fuel depots	..	..	..	..	..	..	..	2

(c) Causes of accidents

Power driven machinery in motion .. .. .	3
Vehicle in motion, not moved by power .. .. .	1
Vehicle in motion, moved by power .. .. .	2
Vehicle stationary .. .. .	1
Hand tools .. .. .	2
Fall on or from fixed stairs .. .. .	4
Fall from ladders or step ladders .. .. .	5
Other falls from one level to another .. .. .	6
Falls on same level .. .. .	11
Stepping on or striking against object or person .. .. .	4
Handling goods .. .. .	15
Struck by falling object .. .. .	5
Not otherwise specified .. .. .	1

(d) Nature of injury

Fractures and dislocations .. .. .	12
Sprains and strains .. .. .	14
Amputation .. .. .	1
Open wound and surface injury .. .. .	11
Bruising, crushing and concussion .. .. .	20
Foreign body in eye .. .. .	1
Burns .. .. .	1

(e) Site of injury

Head: Scalp .. .. .	3
Eye .. .. .	1
Other .. .. .	1
Trunk: back .. .. .	10
Upper limbs: Hand .. .. .	11
Other .. .. .	9
Lower limbs: Toe .. .. .	2
Foot .. .. .	7
Lower leg/ankle .. .. .	11
Other .. .. .	4
Other (multiple injuries) .. .. .	1

The majority of accidents were in retail shops and the main causes were falls and the improper handling of goods. Enforcing inspectors found in general that there were very few breaches of the Act and most accidents were caused by human error or carelessness. A letter was sent to one employer following an accident to a young person whilst he was using a gravity feed slicing machine; two employers were written to regarding untidy conditions in storerooms, and in one case the department contacted a supplier of soft drinks where it was found that crates in which bottles were supplied were in poor structural condition.



**TABLE B 29**

Premises	Registered during the year	Registered at end of year	Premises receiving a general inspection during the year
Offices	185	2,109	84
Retail shops	135	2,587	187
Wholesale shops, warehouses	15	366	19
Catering establishments open to the public, canteens	14	372	23
Fuel storage depots	Nil	3	Nil
Totals	349	5,437	313

*Visits of all kinds by Inspectors to registered premises — 4,959*

*Analysis of persons employed in registered premises by workplace*

**TABLE B 30**

Class of premises	Persons
Offices	23,433
Retail shops	13,001
Wholesale shops, warehouses	4,117
Catering establishments open to the public	2,992
Canteens	287
Fuel storage depots	25
Total	43,855
Total Males	20,845
Total Females	23,010

### *Exemptions*

**TABLE B 31**

Part I	Space (Sec. 5(2))	Part II	Temperature (Sec. 6)
Part III	Sanitary conveniences (Sec. 9)	Part IV	Washing Facilities (Sec. 10)

Premises	Exemptions at 31st Dec.	Granted or extended during year	Refused or withdrawn during year	Cases where employees opposed application	Appeals to Courts	
					Decided	Allowed
Offices Retail shops Wholesale shops Warehouses Catering estab. open to the public, Canteens Fuel storage depots	NIL	NIL	NIL	NIL	NIL	NIL

Legal Proceedings

23 summonses were issued during the year for contraventions under the Act and regulations made thereunder. The prosecutions concerned four different sets of premises: there was one instance where the occupier of a shop had to be prosecuted twice for continuing offences.

Details of the proceedings are as follows:-

TABLE B 32

Section of Act or Order/Regulations	Persons or companies prosecuted	Summonses	Convictions
Information for Employees Regulations (N.I.) 1967	2	3	3
Section 24 and First Aid Order (N.I.) 1967	2	3	3
Section 6 (4)	2	3	3
Section 10 (1)	3	4	4
Section 16 (1)	2	3	3
Section 4	1	1	1
Section 6 (1)	1	1	1
Section 9 (2)	3	5	5
Totals		23	23

Complaints to Courts under Section 22 .. .. . Nil

Interim Orders granted .. .. . Nil

\*Inspectors appointed under Section 51 (1) of the Act .. .. . 10

Other staff employed for most of their time on work in connection with the Act .. .. . 3

\* As per Circular Letter P.H. 5/70 (Ref. 17870/68)

Inspectors who spend more than half their time on O.S.P. duties 4

Inspectors who spend less than half their time on O.S.P. duties 6

In addition to duties under the Office and Shop Premises Act, public health nuisances and contraventions of local acts are dealt with. These (and complaints made to the department) are investigated and action is taken under the Public Health Acts and local acts. Details:-

Public health nuisances .. .. . 114

Notices issued .. .. . 97

\*Nuisances abated .. .. . 141

Reports of contraventions of local acts .. .. . 12

Reports on dangerous structures .. .. . 6

\* Nuisances abated include those outstanding from 1969.

## Pharmacy and Poisons Act (N.I.) 1955

### *Poisons Regulations (N.I.) 1956*

The following is a summary of the work carried out under the above Act and Regulations:-

Inspections .. .. .	237
Premises on register at 1st January, 1970 .. .. .	220
Deletions from the register during the year .. .. .	20
Additions (new registrations) .. .. .	4
Premises on register at 31st December, 1970 .. .. .	204
Contraventions discovered .. .. .	5

## Rag Flock Act, 1911

### *Rag Flock Regulations, 1912*

In connection with the above Act and Regulations the following work was carried out during the year:-

Inspections of premises .. .. .	41
Premises where Rag Flock is used .. .. .	33
Samples of Rag Flock submitted for analysis .. .. .	29
Samples of Rag Flock in compliance with Regulations .. .. .	29

## Toys (Safety) Regulations (N.I.) 1967

The Toys (Safety) Regulations provide safeguards against the sale of certain children's toys which may be dangerous or injurious to health. Included in the Regulations are restrictions on the amount of dangerous substances which may be contained in paint used on children's toys. Four samples of toys were procured and found to be in compliance.

## Fabrics (Misdescription) Act, 1913

### *Fabrics (Misdescription) Regulations (N.I.) 1959*

The Fabrics (Misdescription) Act and the Regulations made thereunder make it an offence for any person to sell, or expose for sale, or have in possession for sale any textile fabric, either in the piece or made up into garments, or in any other form, to which is attributed the term of non-inflammability or safety from fire, either by markings, labelling, or by verbal representation at the time of sale, unless such clothing or fabrics conform with the standards prescribed.

Two samples of furnishing fabrics were procured under the Regulations, one sold as "flame resistant" and the other as "low flammability": both samples were submitted for testing and one proved to be not in compliance with British Standard 3121. Immediate action was taken by the Department and the offending material was withdrawn from sale.

Two other samples described as "flame resistant" were tested and were found to be in compliance with the standard prescribed by the Regulations.

## FOOD AND DRUGS

The following regulations were made during the year:—

### *The Cheese Regulations(N.I.) 1970 (operative 31.1.70)*

These regulations re-enact with amendments the Cheese Regulations (N.I.) 1966 (as amended).

The regulations:

- (a) specify requirements for the composition and description of cheese including hard cheese, soft cheese (including cream cheese), whey cheese, processed cheese and cheese spread (regulations 4, 5, 6, 7, 8 and Schedule 1) amended to prescribe compositional standards for additional varieties of cheese or processed cheese sold under varietal names (regulations 4, 5, 7 and Schedule 1);



- (b) apply compositional requirements for cheese, processed cheese or cheese spread sold as part of a compound product (regulation 9);
- (c) specify the permitted ingredients in cheese, processed cheese and cheese spread, amended to include calcium hydroxide as a permitted ingredient (regulation 11);
- (d) specify requirements for the labelling and advertisement of cheese, processed cheese, cheese spread and compound products (regulations 12, 13, 14 and 15);
- (e) provide for certain amendments to the requirements for the labelling of cheese, processed cheese, cheese spread and compound products to take effect from 1st January 1973 (regulations 4, 7, 14(2), and Schedule 2, paragraph 2).

The regulations do not apply (except insofar as they relate to advertisements) to cheese, processed cheese, cheese spread and compound products, intended for export, for consumption by a visiting force or for use for manufacturing purposes (regulation 3).

*The Labelling of Food Regulations (N.I.) 1970* (part operative 1.5.70; remainder 1.1.73)

These regulations revoke the Labelling of Food Regulations (N.I.) 1968 on 1st May 1970 (before those regulations would have come into operation for all foods other than those containing cyclamates). They supersede the Labelling of Food Regulations (N.I.) 1961 on 1st January 1973. The regulations:

- (a) amend the provisions relating to the labelling of pre-packed food for sale by retail and the list of foods to which they apply (regulations 5 to 7 and 28, Schedules 1, 2 and 5);
- (b) similarly amend the provisions relating to the labelling of pre-packed food sold otherwise than by retail and the list of foods to which they apply (regulation 8);
- (c) impose requirements as to the labelling of certain foods for sale by retail which are not pre-packed (regulations 9 and 28, Schedules 3 and 5);
- (d) impose requirements as to the advertisement of food for sale from vending machines (regulation 10);
- (e) impose restrictions on the use of words "milk", "butter" and "cream" on labels or in advertisements (regulation 20);
- (f) impose restrictions on claims based on the value in, or benefit to be derived from, food; on their ability to provide energy; on their calorie content; or that they are a source of protein (regulations 21, 27 and 28, Schedule 5);
- (g) impose restrictions on claims as to the presence of vitamins and minerals in food (regulations 22, 27 and 28, Schedules 4 and 5);
- (h) impose restrictions on claims that foods are starch-reduced or can aid slimming and prohibit claims that foods have specific weight reducing properties (regulations 23, 24, 27 and 28, Schedule 5);
- (j) impose restrictions on claims that foods are suitable, or have been specially prepared, for diabetics (regulations 25 and 28, Schedule 5);
- (k) impose restrictions on claims that foods have tonic, restorative or medicinal properties (regulations 26 to 28, Schedule 5).

The regulations also contain provisions as to the labelling and advertisement of acetic acid (regulation 12), chocolate confectionery containing intoxicating liquor (regulation 13), dried and dehydrated food (regulation 14), dry mixes (regulation 15), intoxicating and other liquor (regulations 16 and 17), tenderised meat (regulation 18) and processed peas (regulation 19), and as to the labelling and advertisement of food as respects flavours (regulation 11).

The regulations further amend the Labelling of Food Regulations (N.I.) 1961 as respects the designation of a permitted artificial sweetener when forming an ingredient of some other food during the period from 1st May to 31st December 1970 (regulation 32) and amend the Fish and Meat Spreadable Products Regulations (N.I.) 1968 as respects the presentation of descriptions during the period from 1st May 1970 to 31st December 1972 (regulations 33 and 34, Schedule 6).

The regulations do not apply (except insofar as they relate to advertisements) to any food intended for export or supplied for consumption by Her Majesty's forces or a visiting force; nor (until 3rd

January 1983) to any bottles containing a drink which were first used before 4th January 1971 and which bear a fired-on or embossed, but no other, label (regulation 4).

#### *The Cream Regulations (N.I.) 1970 (operative 1.8.70)*

These regulations supersede the Food Standards (Cream) Regulations (N.I.) 1962. The regulations:

- (a) specify requirements for the description and composition of cream (regulation 4);
- (b) specify permitted added ingredients for cream, subject to specified limits (regulation 5), and make consequential amendments to the Emulsifiers and Stabilisers in Food Regulations (N.I.) 1962 (regulation 13);
- (c) specify requirements for the labelling and advertisement of cream (regulations 7 to 10);
- (d) provide that certain requirements relating to the description and composition of cream (regulation 4(1)) and relating to labelling (regulation 9(1)) shall have modified effect before 1st March 1972.

#### *The Emulsifiers and Stabilisers in Food (Amendment) Regulations (N.I.) 1970*

These amending regulations, which come into operation on 1st September 1970, delete brominated edible vegetable oils from the list of emulsifiers and stabilisers permitted for use in food.

#### *The Colouring Matter in Food (Amendment) Regulations (N.I.) 1970*

These amending regulations, which come into operation on 1st January 1971, delete the coal tar colour Ponceau MX from the list of colouring matters permitted for use in food.

#### *The Soft Drinks (Amendment) Regulations (N.I.) 1970*

These amending regulations extend by one year, ending on 31st December 1971, the period during which the words "permitted artificial sweetener" may appear in place of the word "saccharin" on a label on a container of a soft drink.

#### *The Food Hygiene (Docks Carriers etc.) Regulations (N.I.) 1970* (operative 1.7.71 except as otherwise stated)

These regulations prescribe requirements to secure the hygienic handling of food at docks, warehouses, cold stores, carriers' premises and a number of other special types of premises which were excluded from the ambit of the Food Hygiene (General) Regulations (N.I.) 1964, the pattern of which is followed, with adaptations to take account of the circumstances in which food is handled at those places.

Part II of the regulations requires that places and vehicles used for the reception or movement of food are made available in a cleanly condition and so far as practicable are kept in that condition by the persons using them.

Part III contains requirements as to the cleanliness of workers handling food which is not completely protected by its packing and of their clothing and as to the action to be taken where they suffer from or are the carriers of certain infections liable to cause food poisoning.

Part IV contains requirements as to the construction, maintenance and repair of premises and as to sanitary conveniences and the provision of a water supply and washing facilities.

Part V contains administrative provisions including the giving of certificates of exemption (as authorised by section 13(4) of the Food and Drugs Act (N.I.) 1958) from the requirements of regulations 12(2), 14(4), 15(2) and 16 of an inlet into a soil drainage system and the provision of washing facilities if through special circumstances compliance with those requirements cannot reasonably be required. There is an appeal to a court of summary jurisdiction against the refusal or withdrawal of a certificate.

### **Food and Drugs Sampling**

1,050 samples of food and drugs were taken for chemical analysis during the year. In two instances samples of minced steak found by the Public Analyst to contain preservatives, were challenged in Court. The Resident Magistrate ordered that the third portions be submitted to the Government



Chemist in London, who subsequently confirmed the Public Analyst's findings. An imported pottery vinegar container was submitted to the Public Analyst for the analysis of white deposits adhering to the surfaces of the container, and it was found to contain 200 parts per million of lead. It was clear from this analysis that this container was unsuitable for use as a vinegar container. The Ministry of Health and Social Services were informed accordingly so that the matter could be taken up with the importers.

The following table shows the number of samples procured during the past five years and the numbers adulterated.

TABLE B 33

	Number			Adulterated			Percentage adulterated		
	Formal	Informal	Total	Formal	Informal	Total	Formal	Informal	Total
1966	1,018	52	1,070	34	6	40	3.34	11.54	3.74
1967	1,013	51	1,064	44	7	51	4.34	13.72	4.8
1968	1,000	61	1,061	27	11	38	2.7	18.04	3.68
1969	992	60	1,052	22	4	26	2.22	6.66	2.47
1970	999	51	1,050	34	2	36	3.4	3.92	3.42

*Samples of Food and Drugs analysed by the Public Analyst*

TABLE R 34

Article	Number	Article	Number
Ale	4	Cherries, glace	2
Angelica	1	Cinnamon, ground	1
Baconburgers	2	Cochineal	1
Bananas	1	Cocoa	1
Barley	1	Coffee, pure ground	2
Beans, baked	1	Condiment, non-brewed	3
Beans, baked in tomato sauce	1	Confectionery	1
Beans, baked with pork		Confectionery, frozen	5
sausage	1	Cream, dairy	1
Beans, baked with tomato and		Cream, double	1
cheese sauce	1	Cream, salad	4
Beans, sliced green	1	Cream, sterilized	2
Beef, corned	4	Cream, sterilized dairy	1
Beef, minced	7	Cream, whipping	2
Beef, potted	2	Crystals, jelly	1
Beefburgers	3	Curry, beef	1
Beer	4	Dessert, instant	1
Brandy	2	Doughnuts, cream	1
Brawn	1	Drink, malted chocolate	1
Bread, soda, buttered	1	Dripping	1
Bread, sliced (1 Informal)	2	Eggs, pasteurised frozen	
Browning	1	(Informal)	44
Butter	7	Emulsifier (Informal)	1
Butter, peanut	2	Essence, coffee and chicory	1
Buttermilk	12	Evacuant, cascara	1
Cake, chocolate	2	Extract, malt with cod liver	
Cake, fish	5	oil	1
Cake, fresh cream	5	Fat, cooking	2
Cake, fresh cream custard	1	Flakes, wheat germ	1
Cake, portion of chocolate		Flour, plain	1
slab (Informal)	1	Flour, self-raising	3
Cheese	2	Food, milk, full cream	
Cheese, Cheddar	3	(1 Informal)	2
Cheese, Cheshire, processed,		Frankfurters	1
sliced	1	Fruit, canned	3
Cheese footballs	1	Fruit, dried	1
Cheesc, full cream, soft with		Fudge, buttered	1
ham	1	Gin	2
Cheesc, full fat, soft	1	Ginger, ground	1
Cheese, lemon	3	Glycerine, lemon and honey	1
Cheese, processed	1	Grapefruit	1
Cheese, smoked, full fat, hard	1	Gum, chewing	2



TABLE B 34 (contd.)

Article	Number	Article	Number
Ham, chopped with pork	2	Preserves:-	
Ham, cooked (Informal)	1	Curd, lemon	1
Hamburgers	2	Jam, apricot	1
Honey	2	Jam, blackcurrant	1
Ice-cream	48	Jam, home-made, plum	2
Jelly, table	1	Jam, home-made, strawberry	1
Juice, fruit	2	Jam, marrow with ginger	1
Juice, vegetable	1	Jam, mixed fruit	1
Ketchup, tomato	3	Jam, rhubarb	1
Lard	1	Jam, strawberry	2
Lemons	1	Marmalade	2
Liver, pigs	3	Mincemeat	1
Loaf, Milk	2	Pudding, black	1
Lozenges, cinnamon	1	Pudding, macaroni, milk	1
Margarine	6	Pudding, sponge and syrup	1
Marzipan	2	Pudding, steak and kidney	1
Mayonnaise	3	Relish, Yorkshire	1
Meat, luncheon	1	Rice	1
Meat, pork luncheon	1	Rice, ground	1
Milk, condensed, full-cream, unsweetened	1	Rissoles, beef	1
Milk, condensed, skimmed, sweetened	1	Rissoles, pork	1
Milk, full-cream, condensed	3	Rolls, ham and beef	1
Milk, full-cream, evaporated	1	Rolls, ham and chicken	1
Milk, low fat, skimmed, dried	1	Rolls, meat	1
Milk substitute	1	Rolls, sausage	6
Mixture, dried fruit	1	Rolls, savoury	1
Mixture, ice-lolly	1	Rum, white	1
Mustard	3	Sago	1
Oil, olive	1	Salad, cole slaw	1
Oil, pure corn	1	Salami, smoked	1
Ointment, boric acid	1	Salmon, red	1
Ointment, zinc and castor oil	1	Salt, onion	1
Okra, tinned	1	Sauce, apple	1
Oranges	1	Sauce, chilli	2
Paste, anchovy	1	Sauce, horseradish	1
Paste, beef	1	Sauce, mint	1
Paste, crab	1	Sauce, shrimp	1
Pasties, Cornish	1	Sausages, canned	1
Pastilles, sugarless	1	Sausages and sausage meat	282
Pastry, fresh cream	1	Scones, buttered	11
Peas, fresh garden	1	Seaweed, edible	1
Peas, processed	2	Sherry	3
Peel, cut mixed	3	Soda, bicarbonate	1
Pepper, white	1	Soft drinks (1 Informal)	25
Pernod	1	Soup and soup mix	2
Pies, meat	3	Spread, cheese with celery	1
Pies, pork	1	Spread, chocolate	1
Pies, shepherds	1	Spread, ham and cheese	1
Pies, steak and kidney	5	Spread, salmon	1
Porter	1	Spread, sardine	1
Potatoes, dried	1	Spread, smoked salmon and shrimp	1
Potatoes, instant mashed	1	Spread, tuna	1
Potatoes, instant mashed flakes	1	Spread, turkey	1
Powder, baking	2	Steak, canned	1
Powder, borax, B.P.	2	Steak, minced	192
Powder, curry	2	Steak, minced, with gravy	1
Powder, ice-cream	1	Steak, stewed	2
Powder, lemon drink	1	Steak, tuna	2
Powder, non-fat milk	1	Steakburgers	1
		Stout, extra	3

TABLE B 34 (contd.)

Article	Number	Article	Number
Suet	1	Whiskey	13
Suet, shredded	2	Wine	1
Sugar, icing	1	Wine, cherry	1
Sweetmilk	88	Wine, Chinese white, dry	1
Syrup, orange and rose hip	1	Wine, greenginger	1
Tablets, stomach, digestive	1	Wine, port	2
Tablets, tonic, yeast	1	Wine, pure grape	1
Tablets, vitamin A	1	Wine, white	1
Tart, rhubarb (Informal)	1	Yogurt	1
Tartar, cream of	2	Total	1,050
Tea	3		
Tonic, vitamin mineral	1		
Trifle, chocolate cream	1		
Vegetables, preserved	1	Non-food samples	
Vermicelli	2	Milk bottle (Informal)	1
Vinegar, cider	1	Vinegar container (Informal)	1
Vinegar, malt	5	Total	2
Vodka	1		
Water, kali	1		

Legal proceedings in respect of adulterated foods

TABLE B 35

Sample	Number taken	Adulterations	Prosecutions	Convictions	Fines	Costs
Doughnuts, cream	1	1	1	1	£5	£2. 8. 0
Sausages and sausage meat	282	14	14	14	£59	£33.10. 4
Steak, minced	192	17	17	16	£147	£53.10.11
	475	32	32	31	£211	£89. 9. 3

In the case of the following samples no legal proceedings were instituted:—pasteurised frozen eggs 1, soft drinks 3.

The results of examination of the non-food samples showed that the milk bottle was not suitable for conveying milk and the vinegar container was not suitable for the purpose. In neither case was a prosecution instituted.

Particulars of samples specially reported on by the Public Analyst:—

*Cooked ham.* A sample of canned ham submitted for analysis showed that the gelatine was in liquid form, but this solidified under refrigeration. White spots on the ham were caused by graining of the meat and not moulds as suspected and the sample was returned as genuine.

*Cream doughnuts.* The “cream” in a sample of cream doughnuts was found to consist of imitation cream and not fresh cream as the use of the word “cream” demands. The sample was returned as adulterated.

*Milk bottle.* Discolourations on the interior surface of an empty milk bottle were found to be caused by materials fused into the glass surface. The bottle was not suitable for conveying milk intended for human consumption.

*Minced steak.* Seventeen samples of minced steak contained sulphur dioxide in amounts ranging from 120 to 800 parts per million. The use of sulphur dioxide in minced steak is prohibited.

*Pasteurised frozen eggs.* One sample of liquid whole egg failed to pass the alpha amylase test for efficient pasteurisation.

*Shepherd's pie.* Attention was drawn to the description "shepherd's pie" for an article consisting of flaked pastry enclosing a filling of meat and potato which is not in accordance with the traditional use of the term "shepherd's pie". The product conformed to the standard for a meat and vegetable pie.

*Sliced bread.* A sample of sliced bread examined as the result of a complaint showed evidence of the presence of excess iron in the stained areas, probably caused by knife or cutting blade marks. The sample was returned as inferior.

*Soft drinks.* One sample of mineral water contained a whitish sediment consisting mainly of small yeast-like spores together with a small amount of organic debris and vegetable fibres. One sample of Cola drink contained mould material. One sample of Orange with natural fruit juice was sweetened with cyclamates, contrary to the Artificial Sweeteners in Food Regulations (N.I.) 1969. All three samples were returned as adulterated.

*Sausages and sausage meat.* Twelve samples contained sulphur dioxide in amounts ranging between 620 and 3,360 parts per million and one undeclared sample contained 250 parts per million. Sausages and sausage meat may contain a maximum of 450 parts per million of sulphur dioxide, when declared. One sample of pork sausages had a meat content of 53 per cent. Pork sausages should have a meat content of not less than 65 per cent as stipulated by the Sausage and Other Meat Product Regulations (N.I.) 1967.

*Vinegar container.* An empty vinegar container was found to be contaminated with lead compounds soluble in acetic acid and was therefore unsuitable for use as a vinegar container.

MILK CONTROL

The following tables indicate the control exercised over milk sold within the city.

Dairies where milk is pasteurised	..	..	..	..	2
Gallons of milk pasteurised per day (average)	..	..	..	..	40,500
Retail distributors of milk	..	..	..	..	1,321
Inspections of milk shops	..	..	..	..	226
Samples of sweetmilk taken for chemical analysis	..	..	..	..	88
Samples of sweetmilk taken for bacteriological examination	..	..	..	..	390
Samples of sweetmilk taken for culture examination	..	..	..	..	165

*Sweetmilk samples procured for chemical analysis during five years 1966–1970*

TABLE B 36

Year	Number	Adulterated	Percentage adulterated
1966	141	1	0.7
1967	136	—	—
1968	125	1	0.8
1969	97	1	1.04
1970	88	—	—

*Average monthly composition of milk samples examined by Public Analyst*

TABLE B 37

Month	Number	Total solids per cent	Fat per cent	Solids not fat per cent
January	2	12.3	3.7	8.6
February	3	12.4	3.8	8.6
March	9	12.3	3.7	8.6
April	10	12.2	3.7	8.5
May	30	12.1	3.5	8.6
June	2	12.2	3.6	8.6
July	—	—	—	—
August	1	12.2	3.6	8.6
September	10	12.3	3.7	8.6
October	20	12.5	3.8	8.7
November	—	—	—	—
December	1	12.6	4.1	8.5



*Bacteriological examination of milk*  
(excluding samples taken from schools)

**TABLE B 38**

Test	Grade	Samples examined	Satisfactory		Unsatisfactory	
			Number	Per cent	Number	Per cent
Plate Count	Farm bottled	93	60	64.5	33	35.6
Coliform	Farm bottled	93	93	100	—	—
	Pasteurised	297	264	89.7	33	10.3
Phosphatase	Pasteurised	297	297	100	—	—
Culture	Farm bottled	165	165	100	—	—
Viable organisms	Farm bottled	165	106	64.3	59	35.7

*Bacteriological examination of milk supplied to schools*

**TABLE B 39**

Test	Grade	Samples examined	Satisfactory		Unsatisfactory	
			Number	Per cent	Number	Per cent
Coliform Phosphatase	Pasteurised	29	25	86.2	4	13.8
	Pasteurised	29	29	100	—	—

*Bacteriological examination of yoghurt and ymer*

66 samples of yoghurt and 2 samples of ymer taken for bacteriological examination were reported as satisfactory.

*Mineral waters*

171 samples were procured for bacteriological examination: 3 were found to be unsatisfactory due to the presence of coliform organisms. Each adverse case was investigated.

*Frozen confectionery*

248 samples were examined and 79 were found to be unsatisfactory due to the presence of coliform organisms. All the unsatisfactory cases were investigated and, in the case of those manufactured in the City, investigations were carried out at the factory.

*Bacteriological examination of eggs*

43 samples of frozen liquid eggs were taken for examination. No salmonellae were isolated in any of these samples but in a few cases there was a high bacteriological count. In these cases the bakeries were revisited and advice given concerning the storage and handling of these products.

*Pasteurisation of liquid eggs*

44 samples were procured from bakeries and bakery sundriesmen. These were submitted to the Public Analyst for the alpha-amylase test. One sample did not comply with this test. As it was pasteurised outside the City, the Health Authority concerned was informed.

*Desiccated coconut*

43 samples were taken from bakeries and bakery sundriesmen for bacteriological examination and all produced satisfactory results.

*Bacteriological examination of gelatine*

4 samples of gelatine were submitted for bacteriological examination and all were found to be satisfactory.

### *Bacteriological examination of marshmallow mix*

2 samples of marshmallow mix submitted for examination were both satisfactory.

### *Imported fruits*

Samples of citrus fruit and bananas were submitted for examination for the presence of colouring matter and antibiotics. All complied with the relevant Regulations.

### *Merchandise Marks Acts, 1887 to 1926*

During routine inspections, it was found that in most instances Marking Orders under the above Acts were being complied with. Verbal warnings were given in a few cases. It was not found necessary to institute legal proceedings.

### **The control of food unfit for human consumption**

Extensive flood damage to 22 food premises during the month of August accounted for 54 tons and 29,462 tins of food rendered unfit for human consumption.

432 bottles of orange drink containing cyclamates, imported from the Republic of Ireland, were destroyed at the request of the manufacturer's agent, and a complete consignment of condensed machine skimmed milk consisting of 9,600 tins was found to be in a blown condition due to a fault in the canning factory.

283 turkeys were seized from a public cold store due to the presence of a mould.

70,000 tins of canned beans, contaminated with nitric acid during transit, had to be destroyed under the supervision of the Food Inspectors.

5 samples of mussels taken from the foreshore of Belfast Lough for the presence of dinoflagellate toxins proved negative.

4,106 certificates relating to unfit food surrendered by traders were issued during the year.

### *Poultry inspection*

The following poultry were examined at two poultry killing premises within the City.

**TABLE B 39**

	Examined	Condemned	%
Boiling fowl	45,674	720	1.6
Roasting fowl	1,378	—	—
Ducks	82	—	—
Turkeys	309	—	—
Geese	28	—	—
	47,471	720	1.5

**TABLE B 40**

Year	Poultry examined	Number condemned
1966	37,339	592
1967	40,927	457
1968	50,931	320
1969	52,037	453
1970	47,471	720

TABLE B 41

Diseases	Boiling fowl
Leucosis	62
Tumours	151
Ascites	150
Injuries	52
Abscess	1
Decomposition	206
Emaciation	13
Moribund	70
Peritonitis	15
Total	720

*Unfit foodstuffs surrendered by traders after inspection and destroyed*

TABLE B 42 (a)

Articles	Containers	Articles	Containers
Baby food	16,119	Meat	51,680
Beans	28,418	Milk	17,849
Beetroot	679	Minerals	84
Biscuits	15,858	Miscellaneous	537
Bisto	147	Mustard	250
Bread	471	Peas	2,700
Cakes	1,261	Pepper	107
Cake mix	84	Pickles	14,713
Carrots	728	Pie filling	205
Cereal	368	Preserves	181
Cheese	1,361	Puddings	5,698
Confectionery	3,307	Rice	1,311
Corn	92	Sandwich spread	158
Cornflour	90	Sauce, ketchup and salad	
Cream	404	cream	1,129
Curry	16	Soup and broth	14,400
Eggs	720	Spaghetti	6,347
Fish	867	Spice	42
Flavouring	38	Stew	40
Frozen food	8,601	Stuffing	163
Fruit	5,905	Tomatoes	1,073
Fruit juice	1,316	Tomato juice	94
Ginger	48	Tomato puree	192
Ham	920	Vegetables	1,506
Ice-cream	77	Vegetable juice	33
Jellies	2,080	Vinegar	24
Macaroni	18	Yoghurt	384

TABLE B 42 (b)

Articles	Tons	Cwts	Lbs	Articles	Tons	Cwts	Lbs
Batter	—	—	84	Fruit (dried)	—	2	34
Beans	—	3	71	Ham	9	16	38
Biscuits, wafers and cones	1	17	86	Lard	—	—	59
Butter	1	10	62	Margarine	—	10	57
Carrots	1	6	46	Marzipan	—	4	103
Cheese	—	14	92	Meat	6	2	28
Coconut	—	1	88	Onions	12	9	93
Confectionery	1	11	102	Pastry	—	1	58
Cooking fat	—	11	58	Peas	1	4	105
Cooking salt	—	2	17	Pudding mix	—	5	0
Cream of tartar	—	—	84	Rice	—	5	23
Fish	—	1	71	Shortening	—	9	56
Fish dressing	—	5	82	Sugar	—	13	64
Flavouring	—	—	36	Tea	1	11	14
Flour	—	10	87	Tomatoes	—	8	51
Fruit	8	17	86	Vegetables	—	10	100
				Walnut halves	—	8	36



283 frozen turkeys; 1 bottle of lemonade; 2 jars of strawberry jam; quantity of sausages and bread rolls; 1 bottle of orange crush; 1 tin of pears; portion of cooked fish; 1 tin of corned beef; quantity of pork sausages; 1 chicken; 1 pork pie; portion of fish and chip supper; 1 packet of butter; 2 apple tarts; portion of hamburger; 1 meat pie; quantity of ham; 2 packets of bacon; 1 confectionery lollipop; portion of loaf bread; 1 salad sandwich; 4 bottles of sweet milk; quantity of cooked chicken and chips; 1 carcase of pork; 1 carton of cheese spread; quantity of sliced tongue; portion of chop; 1 white pudding; portion of meat; 2 cartons of yoghurt; portion of steak and kidney pie; 3 apple tarts; 7 loaves; 1 bread roll; 1 chocolate pastry; 1 fruit scone; 1 fruit square; 2 cream sandwiches; 3 scones; 1 ginger bun; 1 wheaten farl; 1 sausage roll.

*Foreign matter in food*

Insect in bottle of lemonade  
Mould on jar of strawberry jam  
\*Foreign matter in bottle of orange crush  
Mould on tin of pears  
\*Worms in portion of fish  
\*Mould on tin of corned beef  
\*Mould on quantity of pork sausages  
\*Mould on potato farl  
\*Mould on pork pie  
Insect in fish and chip supper  
Foreign matter in packet of butter  
\*Mould in apple tarts (2 instances: 1 prosecution)  
Mould on hamburger  
Mould on meat pie  
\*Maggots on quantity of ham  
\*Mould on packet of bacon (2 instances: 2 prosecutions)  
\*Metal object in confectionery lollipop  
Mould on portion of loaf bread  
Insect in salad sandwich  
Foreign matter in bottle of sweetmilk (4 instances)  
\*Insects in quantity of cooked chicken and chips  
\*Mould on carton of cheese spread  
\*Mould on quantity of sliced tongue  
\*Mould on cooked chop  
\*Mould on white pudding  
\*Mould on portion of meat  
Mould on carton of yoghurt (2 instances)  
Mould on loaf (3 instances)  
Mould on steak and kidney pie  
\*Insect in jar of strawberry jam  
Insect in sliced loaf  
Piece of glass in wheaten farl  
Insect in bread roll  
Piece of metal in sliced loaf  
Mould on chocolate pastry  
\*Nail in fruit scone  
Oil stain on apple square  
Mould on fruit square  
\*Mould on cream sandwich (2 instances: 1 prosecution)  
Piece of sacking in brown loaf  
Metal tack in sausage roll  
Metal object in scone  
\*Piece of plastic in ginger bun  
\*Insect in cream doughnut  
Insect in scone  
Piece of cloth in plain loaf  
Piece of glass in meat pasty  
Piece of glass in scone

Piece of glass in wheaten farl  
 Piece of wood in sausage roll  
 Piece of wire in scone  
 \*Piece of wood in bread roll  
 \*Foreign matter in plain loaf

\* Denotes legal proceedings taken.

*Bacteriological samples of cooked meat*

TABLE B 43

Sample	Examined	Satisfactory	Unsatisfactory
Cooked ham	71	45	26
Roast pork	26	23	3
Jellied veal	10	9	1
Roast beef	23	14	9
Corned beef	43	35	8
Luncheon meat	16	12	4
Miscellaneous	133	85	48
Totals	322	223	99

Where unsatisfactory results were reported, the vendors were advised on the storage and handling of the products, the use of detergent/sterilizing agents for cleansing equipment, etc., and the necessity of maintaining adequate supplies of hot water.

*Bacteriological examination of cream pastry products*

38 samples of creampastry products were submitted for bacteriological examination. 9 of these were found to be unsatisfactory.

ICE-CREAM

*Premises registered for the manufacture and sale of ice-cream*

TABLE B 44

	Manufacture	Manufacture and sale	Manufacture and sale of soft ice-cream	Sale only	Storage	Total
Premises registered at 1st Jan., 1970	3	32	15	1,045	3	1,098
Deletions	1	2	2	98	—	103
Registrations	—	2	1	114	—	117
Premises on register at 31st Dec., 1970	2	32	14	1,061	3	1,112

Inspections .. .. .	831
Summonses for selling ice-cream in unregistered premises ..	3
Samples submitted for bacteriological examination .. ..	338
Samples submitted for chemical analysis .. .. .	48
Cautionary letters sent .. .. .	53

*Ice-cream samples taken during the year for chemical analysis*

**TABLE B 45**

Complied with standards		Did not comply with standards	
No.	%	Fat	Total solids
48	100	—	—

*The Ice-cream (Heat Treatment, etc.) Regulations (N.I.) 1961*  
*Methylene Blue Tests (338 samples)*

**TABLE B 46**

Grade	Number	Percentage
1	216	63.9
2	64	18.9
3	35	10.3
4	23	6.9

*Defective conditions discovered on inspection of ice-cream premises*

**TABLE B 47**

Conditions	Instances	Remedied	In progress	Out-standing
Utensils: unsatisfactory method of cleansing	1	1	—	—
Wash-hand basins and sinks: hot and cold water not provided or not maintained	1	1	—	—
No sink for utensil washing	1	1	—	—
Totals	3	3	—	—

## FOOD HYGIENE

Particular attention was given to catering premises during the year under review. The Health Education Officer has been engaged with the food inspection staff and is available to arrange lectures and the distribution of literature. His personal contact with catering staff has been beneficial.

In two instances it was found necessary to institute legal proceedings against the owners of restaurants for breaches of the Food Hygiene Regulations. On conviction they were fined £100 and £60 respectively.

Two cafe owners who were not prepared to carry out the works necessary to comply with existing legislation closed their premises during the year.



*Details of plans showing proposed alterations to food premises*

99 plans were submitted to the Department to ensure that the premises, classified as follows, complied or would comply with the relevant legislation.

Butchers .. .. .	2
Cafes .. .. .	12
Cold store .. .. .	1
Community centre .. .. .	1
Confectionery .. .. .	4
Egg packers .. .. .	3
Fish and chip shop.. .. .	1
Fruit and vegetable shops .. .. .	2
Grocery .. .. .	5
Hostels .. .. .	3
Hotels .. .. .	7
Industrial canteens.. .. .	3
Licensed premises .. .. .	24
Meat factory .. .. .	1
Meat wholesaler .. .. .	1
Restaurants .. .. .	7
Sandwich bars .. .. .	3
School meals kitchens .. .. .	4
Supermarkets .. .. .	15

The City Planning Officer requested our comments on 18 cases of proposed conversion of existing property into the following types of food premises:—

Cafes .. .. .	6
Fish and chip shops .. .. .	1
Fish shop .. .. .	1
Grocery .. .. .	1
Gut grading .. .. .	1
Licensed premises .. .. .	1
Meat factory .. .. .	1
Potato peeling premises .. .. .	1
Restaurants .. .. .	3
Sandwich bars .. .. .	2

**Inspection of food premises**

**TABLE B 48**

Trade or business	Inspections	Trade or business	Inspections
Bacon curing stores	4	Institution kitchens	10
Bakeries	141	Licensed clubs	31
Bottling stores	50	Markets	610
Butchers	1,629	Meat factories	126
Cafes and restaurants	934	Milk retailers	226
Chemists	86	Mineral water factories	63
Cold stores	114	Mobile vans	88
Confectionery	1,586	Pastry shops	18
Fish	439	Pet food manufacturers	90
Fish and chip shops	456	Pet food shops	7
Food manufacturers	90	Poultry	739
Fruiterers	1,175	Provisions	610
Grocers	2,652	Public houses	351
Hawkers carts	68	School meals kitchens	87
Hotels and guest houses	100	Shellfish on foreshore	32
Ice-cream	831	Supermarkets	865
Industrial canteens	74	Wholesale stores	1,198
Total		15,580	

### Butchers' premises

Premises registered at 1st January, 1970	..	..	..	354
Deletions ..	..	..	..	36
Registrations	..	..	..	41
Premises registered at 31st December, 1970	..	..	..	359
Inspections	..	..	..	1,629

### *Defective conditions discovered on inspection of butchers' premises*

**TABLE B 49**

Conditions	Instances	Remedied
Unsuitable cloakroom accommodation	2	1
Foodstore: walls, floors, ceilings, windows, etc., required cleansing	3	2
Foodstore: walls, floors, ceilings, windows, etc., in disrepair	2	1
Preparation rooms: walls, ceilings, floors, windows, etc., required cleansing	6	4
Preparation rooms: walls, ceilings, floors, windows, etc., in disrepair	5	4
Fixtures and fittings in a state of disrepair	2	—
Cold rooms: walls, ceilings, etc., in disrepair	2	2
First-aid materials not provided	5	5
Suitable and sufficient washing facilities not provided	3	2
Supply of soap and towels not sufficient or not provided	3	2
No wash-hand basin for personal washing facilities	2	1
Utensils: unsatisfactory method of cleansing	1	1
Wash-hand basins and sinks: hot and cold water not provided or insufficient	3	2
No sink for utensil washing	1	—
Totals	40	27

### *Defective conditions discovered in food premises (excluding butchers', ice-cream, fish and chip shops, restaurants, cafes, snack-bars, canteens and licensed premises)*

**TABLE B 50**

Conditions	Instances	Remedied
Unsuitable cloakroom accommodation	5	3
Sanitary conveniences within or communicating direct with food room	5	4
Foodstore: walls, floors, ceilings, windows, etc., required cleansing	13	9
Foodstore: walls, floors, ceilings, windows, etc., in disrepair	17	11
Foodstore: lighting and ventilation not provided or maintained	4	2
Preparation rooms: walls, floors, ceilings, etc., required cleansing	2	2
Preparation rooms: walls, floors, ceilings, etc., in disrepair	2	2
Fixtures and fittings in disrepair	2	—
First-aid materials not provided	16	10
Trays, drainers or sinks defective or worn, or cleanliness not observed	1	—
Utensils: unsatisfactory method of cleansing	5	5
Suitable and sufficient personal washing facilities not provided	16	11
Supply of soap and towels not sufficient or not provided	5	5
Wash-hand basins and sinks: hot and cold water not provided or maintained	21	14
No wash-hand basin for personal washing facilities	9	6
No sink for utensil washing	3	3
Other defects	8	2
<i>Sanitary accommodation:</i>		
Sanitary accommodation not provided or insufficient for males	1	—
Floors, basins, seats, walls, etc., dirty	3	1
Floors, basins, seats, walls, etc., defective	4	1
Totals	142	91

*Defective conditions discovered in restaurants, cafes, snack-bars and industrial canteens*

**TABLE B 51**

Conditions	Instances	Remedied
Fixtures and fittings in disrepair	1	1
First-aid materials not provided	1	1
Suitable and sufficient personal washing facilities not provided	2	2
Wash-hand basins and sinks: hot and cold water not provided or maintained	2	2
No wash-hand basin for personal washing facilities	1	1
Totals	7	7

*Defective conditions discovered in licensed premises, bottling stores and clubs*

**TABLE B 52**

Conditions	Instances	Remedied
Unsuitable cloakroom accommodation	3	1
Foodstore: walls, floors, ceilings, windows, etc., required cleansing	2	1
Foodstore: walls, floors, ceilings, windows, etc., in disrepair	2	—
Bars: walls, ceilings, floors, windows, etc., required cleansing	1	1
Bottling stores: walls, ceilings, floors, etc., required cleansing	1	1
Fixtures and fittings in a state of disrepair	1	1
First-aid materials not provided	3	2
Suitable and sufficient personal washing facilities not provided	3	1
Supply of soap and towels not sufficient or not provided	1	—
Wash-hand basins and sinks: hot and cold water not provided or maintained	4	1
No wash-hand basin for personal washing facilities	1	—
Other defects	1	1
<i>Sanitary accommodation</i>		
Floors, basins, seats, walls, etc., dirty	1	1
Lighting and ventilation not provided or insufficient	2	1
Totals	26	12

**Fish and chip premises**

Premises registered at 1st January, 1970	..	..	..	201
Deletions ..	..	..	..	20
Registrations ..	..	..	..	19
Premises registered at 31st December, 1970	..	..	..	200
Inspections ..	..	..	..	456

*Defective conditions discovered in fish and chip premises*

**TABLE B 53**

Conditions	Instances	Remedied
Drain inlets within or communicating direct with food room	1	1
Foodstore: walls, floors, ceilings, windows, etc., in disrepair	3	1
Preparation rooms: walls, ceilings, floors, windows, etc., in disrepair	5	2
Suitable and sufficient personal washing facilities not provided	1	—
Supply of soap and towels not sufficient or not provided	1	—
Wash-hand basins and sinks: hot and cold water not provided or insufficient	1	—
No wash-hand basin for personal washing facilities	1	—
<i>Sanitary accommodation</i>		
Floors, basins, walls, seats, etc., defective	1	—
Totals	14	4



TABLE B 54

Type of Business	Food Hygiene (General) Regulations (N.I.) 1964	Public Health Acts (N.I.) 1878-1967	Belfast Corporation Acts	Bye- Laws	Totals
Butchers	9	11	—	2	22
Cafes and restaurants	1	4	—	—	5
Chemists	4	2	—	—	6
Confectionery	10	13	1	1	25
Fish and poultry	3	—	—	—	3
Fish and chips	1	6	—	—	7
Fruiterers	8	13	—	1	22
Grocers and provisions	14	13	—	—	27
Ice-cream	1	—	—	—	1
Industrial canteens	1	1	—	—	2
Licensed clubs	1	—	—	—	1
Public houses	4	4	1	—	9
Supermarkets	1	1	—	—	2
Wholesale stores	1	1	—	—	2
Totals	59	69	2	4	134

RODENT CONTROL

Civil unrest in the City, coupled with massive re-development has meant that there is an increasing number of premises vacated and either left derelict or bricked up front and rear by the City Surveyor's Department until demolished. In addition, virgin land is being developed with consequent displacement of colonies of established rats. Rodent control in these circumstances is made increasingly difficult: officers are unable to gain admission to premises. During periods of civil unrest infestations in troubled areas had to go untreated and minor complaints were exaggerated. Comparison of premises treated for infestations since 1967 shows a significant increase.

<i>Year</i>	<i>Premises treated for rat infestation</i>
1967	367
1968	354
1969	413
1970	650

In England so-called "super-rats" have been the subject of headline news. These are rats which have become warfarin resistant due to ingesting a non-toxic dose of the poison, resistance being passed to offspring in the genes. Warfarin resistant rats depend on a high proportion of vitamin K which they can only get from fresh green stuffs and fortified animal feeds, which are not generally found in a city. Where one parent is warfarin resistant, the offspring require twice the amount of vitamin, and where both parents are resistant, the offspring require twenty times the amount. To date we have no evidence in Belfast to indicate resistance of rats to warfarin.

Details of the work of this Section are as follows:—

Surveys of lands and premises	..	..	..	..	16,093
Lands and premises found infested	..	..	..	..	841
Rat infestation:—					
1. Food premises	..	..	..	..	52
2. Non-food premises	..	..	..	..	607
Mouse infestation:—					
1. Food premises	..	..	..	..	55
2. Non-food premises	..	..	..	..	127
Poison campaigns carried out for occupiers:—					
1. For rats	..	..	..	..	247
2. For mice	..	..	..	..	99
School buildings and school meals kitchens treated for Education Department:—					
1. For rats	..	..	..	..	49
2. For mice	..	..	..	..	46
Premises cleared of rats and mice by rodent control staff	..				346
Premises where the clearing process was not complete at the end of the year	..	..	..	..	21
Premises test-baited	..	..	..	..	4,329
Premises inspected and not baited	..	..	..	..	1,858
Food premises baited	..	..	..	..	107
Premises where the occupier undertook to eliminate rats and mice on statutory or verbal notice under the Rats and Mice (Destruction) Act, 1919:—					
1. For rats	..	..	..	..	18
2. For mice	..	..	..	..	9
Premises having no evidence of rodents at the time of survey, but with rodent destruction firms on contract	..	..	..		121
Premises where rat-proofing and other work was done to prevent re-infestation	..	..	..	..	316
Notices issued under the Rats and Mice (Destruction) Act, 1919					9
Rat destruction campaigns at Corporation tipping grounds	..				8

Accounts issued for extermination work done for private owners/business premises/Corporation Departments:—

1969	..	..	..	..	..	£1,170
1970	..	..	..	..	..	£1,453

### Sewer Treatment

Sewers provide rats with shelter, food and an underground highway system connecting all parts of a district and also a reservoir of rats which can infest surface areas, to which they gain access through defects in the drainage or sewerage systems, so that the basis of a rat-free city may be fairly said to lie with a rat-free sewer system. Measures to control rats in sewers are carried out continuously and systematically, the labour force being provided by the City Surveyor's Department. Control measures in the sewers are complementary, a direct poison being followed by a chronic poison. The poisoning programmes were considerably disrupted during the year because the operatives were not able to work in areas of civil unrest.

Rat destruction campaigns carried out in the sewerage system ..	252
Pre-baits laid .. .. .	15,697
Pre-baits taken .. .. .	8,686
Poison baits laid .. .. .	11,893
Poison baits taken .. .. .	9,605

### Feral Pigeons

Birds nesting in the City continue to cause considerable annoyance to the public, fouling buildings and pavements with their droppings. During 1970, in co-operation with the Bacteriology Department of the Belfast City Hospital, samples of pigeon droppings were obtained from various sites around the City, 108 samples being examined between April and November for the presence of the fungus *Cryptococcus neoformans*, negative results being obtained in all cases. *Cryptococcus neoformans* causes a variety of generalised infections, including meningitis. These infections are rare in Britain but are relatively common in some other countries. In recent years three of these infections occurred in Northern Ireland, including two cases of meningitis.

### Insect Pests

Modern insecticides have enabled Health Authorities to reduce infestations of the pests common to man such as fleas and bed bugs to minimal proportions. However in this City we have had traumatic upheavals of the populace, due in part to the re-development schemes and in part to civil disturbances. People and their furniture were forced to mingle at emergency welfare centres setup on their behalf. "Moonlighting" from Corporation dwellings is commonplace and as a consequence there have been additional demands on the Department's disinestation service, every effort being made to expedite treatment of welfare centres, temporary army billets, vacated Corporation dwellings, etc., when requested.

Inspections of premises on complaints of insects .. ..	1,551
Premises found to be infested and treated .. ..	697
Treatment carried out for infestations:-	
1. Bed bugs .. .. .	26
2. Cockroaches and steamflies .. ..	237
3. Fleas .. .. .	322
4. Flies .. .. .	70
5. Other insects .. .. .	42
Stables and cattle yards .. ..	36
Rag stores .. .. .	56
Corporation tipping grounds .. ..	14

### Mosquito control

From April to September, 1970 potential mosquito breeding areas were examined and treated.

Areas surveyed and treated with larvicide .. ..	43
Miles run by vehicle .. ..	143
Gallons of waste transformer oil used .. ..	190
Gallons of larvicide used .. ..	14
Gallons of paraffin used .. ..	150
Gallons of petrol used by vehicle and Tifa machine .. ..	14

### Methyl bromide fumigations

Number of notifications of fumigation of tobacco leaf .. ..	6
---	---



## Disinfection and Disinfestation

This section covers the disinfection of premises where infectious disease has occurred and disinfection of clothing and bedding at the disinfecting station. Facilities are available at the station for cleansing and disinfestation of verminous persons. The service provided by the Department with regard to collection, cleansing and delivery of home nursing equipment continues to expand and an additional van was purchased during the year to meet this expansion. During the year assistance was given to the Army in disinfestation of sleeping bags and temporary billets.

### Items dealt with by the Disinfecting Station:—

Infectious articles disinfected by steam	..	..	..	5,717
Articles disinfected by formalin	..	..	..	2,543
Infectious articles destroyed on request	..	..	..	150
Public library books disinfected	..	..	..	49
Articles of home nursing equipment cleansed and disinfected	..			3,789

### The Cleansing Clinic did the following work:—

Verminous persons cleansed	..	..	..	..	63
Treatment for scabies	..	..	..	..	304
Articles disinfected and disinfested	..	..	..	..	868

Five motor vehicles (excluding a Land Rover) were engaged in the work of the Department. During the year these vehicles covered 36,090 miles and used 1,652 gallons of fuel.

## Details of legal proceedings and fines, etc., imposed

**TABLE B 55**

Act	Offence	Summonses	Orders	Fines	Costs
Public Health Acts (N.I.) 1878 to 1967	Failed to abate public health nuisances	1,123	309	£ s. d. 381 6 0	£ s. d. 110 8 0
	Disobedience of Magistrates' Orders to abate public health nuisances	72	—	465 6 6	25 19 0
	Water closets not provided with sufficient water for flushing	61	—	209 0 0	21 12 0
	—ditto— continuing offences	11	—	60 0 0	4 2 0
Belfast Corporation Acts	Gathered shellfish on the foreshore	2	—	14 0 0	1 4 0
	Failed to supply a bin	2	—	5 0 0	0 7 0
Sausage and Other Meat Products Regulations	Sold pork sausages which contained less than 65% of meat	1	—	3 0 0	2 7 9
Slaughterhouses Hygiene Regulations (N.I.) 1963	Used tobacco (a cigarette) while handling meat	1	—	5 0 0	0 7 0
The Preservatives in Food Regulations (N.I.) 1962	Sold food containing preservatives in excess of the permitted amount:—				
	Vegetable roll containing excess sulphur dioxide	2	—	7 0 0	4 14 9
	Beef sausages containing excess sulphur dioxide	8	—	29 0 0	19 4 1
	Sausage meat containing excess sulphur dioxide	1	—	3 0 0	2 8 3
	Sold food containing prohibited preservative:—				
	Minced steak containing sulphur dioxide	12	—	87 10 0	26 19 10
	Failed to label food containing preservative	1	—	2 0 0	2 7 9

TABLE B 55 (contd.)

Act	Offence	Summonses	Orders	Fines	Costs
Food Hygiene (General) Regulations (N.I.) 1964	Failed to keep equipment in good order, repair and condition (Reg. 5)	2	—	28 0 0	0 14 0
	Failed to keep equipment clean (Reg. 5)	5	—	33 0 0	1 15 0
	Failed to protect food from risk of contamination (Reg. 7)	4	—	7 0 0	1 8 0
	Permitted food to be stored in a room with drain inlets (Reg. 11)	2	—	4 0 0	0 14 0
	Failed to provide an adequate supply of hot water (Reg. 15)	5	—	13 0 0	1 15 0
	Failed to provide accommodation for clothing (Reg. 17)	3	—	5 0 0	1 1 0
	Failed to provide an adequate supply of hot water for washing food and equipment (Reg. 18)	3	—	6 0 0	1 1 0
	Failed to provide and maintain suffic- ient lighting and ventilation in a food room (Reg. 19)	1	—	1 0 0	0 7 0
	Failed to keep in good order, etc., the walls in a food room (Reg. 21)	3	—	5 0 0	1 1 0
	Failed to keep clean the walls, ceilings, etc., in a food room (Reg. 21)	7	—	37 0 0	2 9 0
	Deposited refuse in a food room (Reg. 22)	4	—	31 0 0	1 8 0
	Failed to keep clean a motor vehicle or a stall (Reg. 24)	3	—	18 0 0	1 0 0
	Sold food from a stall or motor vehicle not bearing the name and address of the person carrying on the business (Reg. 24)	8	—	26 0 0	2 19 0
	Failed to suitably screen stalls (Reg. 25)	5	—	14 0 0	1 4 0
	Failed to provide stalls with receptacles for waste (Reg. 25)	1	—	—	—
	Failed to provide water, soap, etc., for use on stalls and vehicles (Reg. 26)	9	—	29 0 0	2 17 0
	Transported unwrapped meat on a motor vehicle other than in a meat compartment or a meat container (Reg. 28)	3	—	25 0 0	1 11 0
Food and Drugs Act (N.I.) 1968	Sold food not of the substance de- manded by the purchaser	2	—	13 0 0	0 14 0
	Sold food unfit for human consumption	24	—	139 0 0	9 6 0
	Exposed for sale or had in possession for the purpose of sale food unfit for human consumption	2	—	45 0 0	0 14 0
	Sold ice-cream in unregistered premises	3	—	10 0 0	1 1 0
	Sold food containing substance re- sembling cream which was not cream	1	—	5 0 0	2 8 0
	Wilfully obstructed an officer	1	—	5 0 0	0 7 0
Office and Shop Premises Act (N.I.) 1966/67	Failed to keep the premises, furnishings, etc., in a clean state	1	—	2 0 0	0 7 0
	Failed to maintain a reasonable temp- erature and suitable means for per- sons to warm themselves	1	—	2 0 0	0 7 0
	Failed to provide a suitable thermo- meter	3	—	8 0 0	1 1 0
	Failed to provide and maintain suitable and sufficient sanitary accommoda- tion	5	—	14 0 0	1 15 0
	Failed to provide and maintain suitable and sufficient washing facilities	4	—	14 0 0	1 1 0
	Failed to provide, maintain and keep safe floors, floor coverings, passages, stairs, handrails, etc.	3	—	17 0 0	1 1 0

TABLE B 55 (contd.)

Act	Offence	Summonses	Orders	Fines	Costs
Office and Shop Premises Act (N.I.) 1966/67	Failed to provide and maintain a suitable first-aid box or cupboard	3	—	12 0 0	1 1 0
	Failed to make available information to employees	3	—	8 0 0	1 1 0

Conclusion

This Report reveals the wide and varied duties of the Public Health Inspectorate and it is to their credit that those duties have been faithfully carried out even at times when conditions were unreasonably difficult.

W. JENKINS, M.R.S.H., M.A.P.H.I.,  
*Chief Public Health Inspector.*



# REPORT OF THE CITY VETERINARIAN FOR THE YEAR 1970

## Total Slaughter

The total number of animals (182,759) slaughtered in 1970 showed a decrease of 17,354 compared with 1969. Cattle showed an increase of 1,876; sheep and lambs a decrease of 15,650 and goats a decrease of 159. The total throughput of cattle represented the highest ever in the history of Belfast Abattoir while the continued low figure for sheep is a reflection of the overall reduction in the sheep population of the British Isles.

### Number and description of animals slaughtered each month

TABLE C 1

Month	Cows	Heifers	Bulls	Bullocks	Calves	Sheep	Goats	Pigs
January	58	296	7	4,714	3	11,903	2	49
February	76	184	8	4,103	35	8,142	1	—
March	88	189	8	4,880	1	6,919	1	—
April	85	348	10	5,347	3	6,616	1	—
May	56	199	8	3,583	1	7,596	—	—
June	78	323	4	4,216	—	10,405	—	—
July	66	355	2	4,367	—	9,528	—	—
August	80	352	3	4,942	5	11,008	—	—
September	86	355	6	5,625	113	11,473	5	—
October	92	362	5	5,904	57	10,855	—	—
November	117	278	4	6,187	1	13,190	2	—
December	53	269	8	5,377	1	11,079	1	—
Totals	935	3,510	73	59,245	220	118,714	13	49
Total Cattle		63,985						

GRAND TOTAL 182,759

### Carcase condemnation

The number of carcasses totally condemned in 1970 was 290 compared with 362 in 1969, a decrease of 72. Total condemnations represented 0.16% of the total slaughter. 87 cattle carcasses were seized, representing 0.13% of the total cattle kill and 201 sheep carcasses, representing 0.17% of the total sheep kill.

### Total seizures from all causes

TABLE C 2

Class	1970	1969	Percentage of total kill
Cattle	87	67	0.13
Sheep and lambs	201	254	0.17
Pigs	2	38	4.1
Goats	—	3	—
Totals	290	362	0.16

As far as individual disease conditions are concerned the greatest losses were due to emaciation, generalised oedema, decomposition and fever. Emaciation and oedema were most common in sheep. Total and partial seizure of carcase meat in all species amounted to 76,024 lbs.

That relatively so little meat is condemned out of the various species of livestock slaughtered is a tribute to the very satisfactory health status of Ulster's livestock. The eradication of bovine tuberculosis will shortly be followed by brucellosis and these, together with the effort made by the Ministry of Agriculture to eradicate the warble fly, represent major schemes designed to make Northern Ireland's position for disease-free livestock one of the best in the world.

TABLE C 3

Cause	Cattle	Sheep	Pigs	Goats	Total
Abscesses	1	4	—	—	5
Acetonaemia	4	—	—	—	4
Actinomycosis	1	—	—	—	1
Anaemia	—	1	—	—	1
Arthritis	1	2	—	—	3
Bruising	2	4	—	—	6
Contamination	—	1	—	—	1
Cysticercus bovis	5	—	—	—	5
Decomposition	45	35	—	—	80
Degeneration	1	—	—	—	1
Emaciation	5	66	—	—	71
Enteritis	1	2	—	—	3
Fever	4	7	—	—	11
Jaundice	—	1	—	—	1
Leukaemia	2	1	—	—	3
Lymphadenitis	—	2	—	—	2
Neoplasms	1	2	—	—	3
Odour, abnormal	—	2	—	—	2
Oedema	3	41	—	—	44
Peritonitis	2	7	—	—	9
Pyæmia	2	4	2	—	8
Septic Mastitis	1	—	—	—	1
Septic Metritis	1	—	—	—	1
Septic Pleurisy	—	9	—	—	9
Septic Pneumonia	—	4	—	—	4
Sarcoma	1	—	—	—	1
Septicaemia	3	5	—	—	8
Uraemia	1	1	—	—	2
Totals	87	201	2	—	290

## Bovine Cysticercosis

TABLE C 4

Month	Cases detected	Total slaughter (Cattle)	Percentage incidence
January	395	5,078	7.77
February	268	4,406	6.08
March	263	5,166	5.09
April	259	5,793	4.47
May	176	3,847	4.57
June	365	4,621	7.89
July	387	4,790	8.07
August	358	5,382	6.65
September	402	6,185	6.49
October	370	6,420	5.76
November	325	6,587	4.94
December	217	5,708	3.80
Totals	3,785	63,983	5.92%

The percentage incidence of 5.92% shows a decrease of 2.33% compared with 1969. Although this is a considerable reduction, the incidence of almost 6% for 1970 is considered to be excessively high. While meat inspection can undoubtedly make a contribution to the breaking of the taeniasis cycle, much more can be done through the provision of adequate and efficient sewage disposal facilities and health education.

## City of Belfast Meat Plant

A complete change-over from the old Municipal Abattoir in Stewart Street to the new Meat Plant at Duncrue Pass took place on 12th January, 1970, operations having taken place in both premises for some three months previously. The modern Meat Plant with its different equipment and system of operations has entailed a lengthy settling-in period but it can be said that staff have adapted

themselves to the new environment very satisfactorily. Some modifications relating to equipment and techniques still have to be made and the simultaneous running of both slaughter lines (cattle and sheep) which will shortly be in operation will necessitate an increase in meat inspection and recording staff.

The new Belfast Meat Plant was officially opened by the Prime Minister of Northern Ireland, the Rt. Hon. J. D. Chichester-Clark, M.P., on 28th October, 1970.

### Industrial Nursing

The existence of first-aid facilities and a qualified industrial nurse has considerably reduced the incidence of septic cuts and abrasions and other skin infections. Undoubtedly they are also having an effect on the general personal hygiene standards. Nevertheless it must be stated that considerable improvement in this sphere is absolutely necessary if we are to compete with the high standards obtaining in western European countries, U.S.A., Canada, Japan, etc., to which meat products from Northern Ireland may be exported.

### Meat Trades Training School

The complete fifth floor of the new College of Catering has been devoted to meat trades training. A lecturer for this Department has recently been appointed and is due to take up his duties on 1st June, 1971. In addition to being concerned with training for the retail butchery trade and meat inspection, it is envisaged that other personnel (for example, operatives in meat plants) would also receive instruction.

### Veterinary Laboratory

The following tests were carried out during the year :-

				<i>Number</i>
(1)	Carcase samples (bacteriological)	..	..	360
(2)	Swab tests (carcasses and equipment)	..	..	98
(3)	Water samples (routine bacteriological)	..	..	25
(4)	Salmonella investigations	..	..	47
(5)	Blood samples (total solids estimation)	..	..	109

The laboratory under the control of Mr. E. Welsh, F.I.M.L.T., has proved of immense value as an aid to visual meat inspection assessment as well as to general environmental sanitation. The evaluation of detergents and the investigation of various methods of cleaning and sterilisation have also been carried out. Photography of pathological specimens and other items of interest has been a feature of the year's work.

The investigation of the salmonella carrier status of cattle has shown to date a negative result. This may be a reflection of the general high standard of hygiene adopted in the Meat Plant but since positive results have been obtained in the past this salmonella investigation will be continued. It is hoped in the future to transmit the results of meat inspection, e.g., liver fluke incidence, so that animal disease control may benefit.

### Presentation of Stock for Slaughter

Most of the dirt in any meat plant is associated with the animals received for slaughter. A survey carried out at Belfast Abattoir showed that the average weight of dirt adhering to each of 600 hides examined was 9 lb with a range of 2 - 35 lb. Weights as high as 50 lb. even 80 lb. have been recorded. Dirt also occurs in sheep (especially when these are affected with parasitic gastritis). Representation have been made to the Ministry of Agriculture on this important issue, which occurs mainly as a winter problem when cattle are housed. Steps have also been taken to reject excessively dirty animals.

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*City Veterinarian.*



**REPORT OF SENIOR MEDICAL OFFICER, COMMUNITY HEALTH DIVISION,  
FOR THE YEAR 1970**

**Notification of Births**

The total number of births notified as occurring in Belfast during the year was 9,934. Of these 5,070 were males, 4,864 were females and 2 sex unknown. Included in this total were 158 stillbirths.

**TABLE D 1**

Births occurring in:-	
Hospitals	9,583
Private nursing homes	40
Other institutions	49
Home	256
Home (Hosp. district cases)	6

**Infant Mortality**

During the year, 195 children died under the age of 12 months giving an infant mortality rate of 28. The rate for the previous year was 30.

**Neonatal and Perinatal Mortality**

Deaths occurring during the first month of life numbered 132, giving a neonatal mortality rate for the year of 19. The rate for the previous year was 16. The perinatal rate, i.e., stillbirths and deaths during the first week per 1,000 total births (live and still), was 33 against 30 in the previous year.

**Maternal Mortality**

There were no deaths during the year attributable to pregnancy, childbirth and the puerperal state (1 last year).

**Health Visiting**

74 health visitors were employed at the end of the year. Throughout the year a comprehensive follow-up of all children under five years was maintained by means of both routine and selective visiting. In addition to screening all babies during the first year of life for defects of hearing, a series of tests of general development was introduced. Special attention was given to children in problem families, those on the "at risk" and observation registers and children suffering from handicapping conditions.

At the end of the year 22 health visitors were working in full attachment with group practices, and 9 others had liaison attachments. This arrangement has been working very satisfactorily, but we have not yet been able to meet all the requests from doctors for attachment of staff to practices.

Several health visitors have continued the special visitation of patients with tuberculosis and other chest diseases and the follow-up of contacts. This work is carried out in co-operation with the Central Chest Clinic. Many have special liaison duties with various hospitals. Ten health visitors who have had special training in mental illness devote part of their time to the after-care of psychiatric patients. They visit psychiatric hospitals, attend day hospitals and work in close co-operation with the psychiatrists and psychiatric social workers. In her day to day work in the community the health visitor is often the first to become aware of psychiatric problems. During the year, one health visitor continued the follow-up of children known to be suffering from phenylketonuria. She has been working in close association with the Royal Belfast Hospital for Sick Children and has done much to encourage mothers to persist with the special diet which these children require for normal development.

One health visitor has continued to assist with the follow-up of V.D. patients and contacts and she attends the V.D. department at the Royal Victoria Hospital weekly and at the Ulster Hospital as required. Two of our staff devote a proportion of their time to the follow-up of diabetic cases; they

attend the Metabolic Unit at the Royal Victoria Hospital and visit patients in their homes. Nine others continued their visits to different hospitals and institutions, maintaining the long-established health visitor/hospital liaison, for which there appears to be an increasing demand. Health visitors also work closely with the Welfare Department in the administration of the Home Help scheme with regard to expectant mothers and mothers of young children and in various other aspects of district work.

The work of the health visitors has been increased considerably during the year owing to the continuation of civil unrest. The frequent movement of families into different areas has resulted in difficulties in follow-up work and problems have arisen from over-crowding and temporary housing arrangements.

**Health Education**

A large part of the health visitors' time is spent on domiciliary health education and group teaching at Clinics, covering such subjects as mothercraft, nutrition and food hygiene, prevention of home accidents, care of the feet, dental care, etc. Owing to the continuation of civil unrest in the city, it was not possible to resume the evening sessions which had been so successful.

Talks were given at different hospitals to student nurses on the Community Health Services and the work of the health visitor. Talks were also given by members of staff to youth organisations, parents' associations, British Red Cross, St. John Ambulance Brigade, various church organisations, schools, police, nursing home staff and students at the Rupert Stanley College of Further Education. Twelve health visitors took part in a weekly Health Education programme at the Government Training Centre, Alfred Street, which continued throughout the year.

The work of the senior staff included lectures to fifth year medical students and student district nurses. Educational programmes were prepared during the year for students to see something of the work carried out in the different community health departments. Those who attended included 12 medical students, 48 student health visitors, 30 student district nurses, 117 student nurses and one nursery nurse. Two doctors undertaking post-graduate studies and 6 senior nursing staff (ward sisters, etc.) also attended.

*Visits by Health Visitors during the year*

**TABLE D 2**

Expectant mothers	4,978
Nursing mothers	50,856
Other mothers	38,856
Children under 1 year of age	59,079
Children 1-4 years	76,505
Children 5-14 years	18,915
Mentally disordered persons	4,129
Tuberculosis patients and contacts	4,397
Old people	16,597
Other persons	21,439
Total visits	295,751

**Cervical Cytology**

Cervical cytology was continued at Lincoln Avenue, Cupar Street and Mount Street Clinics and at the Ormeau Road Health Centre. Special sessions were also held at the request of the staff medical service of two organisations in the City employing large numbers of women, for their own employees.

In addition to taking the cervical smear for the early detection of cancer, a full gynaecological examination was carried out, with heart examination and urine testing, so that the clinics tend to be more the "well woman" type.

Sessions held	336
1st visits	1,693
Revisits	1,259
Total attendances	2,952
Positive smears	9

Family Planning

The Family Planning Association continued the clinic at Lincoln Avenue, holding three sessions per week as agents of the Health Committee. Clinics under the direct control of the Health Department were started in two additional centres, as well as continuing in the two centres opened last year. Many of the women attending these clinics had cervical smears taken, two of which gave positive results.

TABLE D 3

	Health Dept.	F.P.A.	Total
Sessions held	210	146	356
1st visits	869	407	1,276
Revisits	1,571	1,425	2,996
Total attendances	2,440	1,832	4,272
Appliances issued free or undercost:			
(1) On medical grounds	303	234	537
(2) Para 4 +	894	527	1,421
Cervical smears	542	380	922

Child Health Centres

The number of sessions provided at the end of the year was reduced to 37 per week. Of these, 14 were in buildings owned by the Health Authority, one was held in the Ormeau Road Health Centre and the other 22 in halls, etc., rented on a sessional basis. The number of weekly sessions at Avoca Street was reduced from two to one due to decreased attendances. The premises in use at Havelock Place were very unsuitable and the work done there was transferred to the clinic at Ormeau Road Health Centre. Malone Clinic was closed because of the very small attendance, but we were fortunate in being able to secure accommodation for a small centre in Turf Lodge, which was opened in June, 1970. A prominent part of the work in the centres was the educational aspect already mentioned. The members of the Voluntary Workers' Association gave valuable help in weighing babies and in arranging social functions for the mothers and once more we thank them for their continued interest in our work.



TABLE D 4

		Under 2 years	Over 2 years	
Monday	Highfield	963	298	
	Ariel Street	954	618	
	Bloomfield	3,310	754	
	Cupar Street	1,554	857	
	Donegall Road	1,784	500	
	Knock	1,303	317	
	Ormeau Road	1,556	492	
	Ballymurphy	911	428	
Tuesday	Glenard	1,755	1,010	Closed March 1970
	Havelock Place	179	20	
	Donegall Road	1,504	504	
	Cupar Street	1,681	618	
	Mount Street	1,361	579	
	Ariel Street	1,071	467	
	Lincoln Avenue	1,760	721	Opened June 1970
	Turf Lodge	401	229	
Wednesday	Avoca Street	91	18	Closed February 1970
	Cupar Street	1,323	810	
	Ligoniel	2,457	1,124	
	Seaview	1,780	784	
	Windsor	1,477	652	
	Mount Street	2,164	842	
	Palmerston Road	1,593	447	
	Susan Street	1,776	557	
	Sandown Road	1,770	287	
	Glencairn	807	273	
Thursday	Avoca Street	1,545	437	
	Kimberley Street	1,728	502	
	Greencastle	1,047	765	
	Mountcollyer	2,176	844	
	Spier's Place	2,219	999	
	Stranmillis	1,341	579	
	Susan Street	1,982	476	
	Mount Street	2,614	1,143	
Friday	Malone	24	27	Closed March 1970
	Ariel Street	1,585	645	
	Joanmount	1,491	838	
	Spier's Place	1,574	694	
	Strandtown	2,440	1,152	
	Ballymurphy	1,394	774	
	Total attendances	60,445	24,081	

## Mother and Baby Homes

*(Ante and post-natal Hostels)*

TABLE D 5

Name and address of Hostel	BEDS						Average length of stay	
	Ante- natal	Post- natal	Labour	Isola- tion	Maternity (excluding labour and isolation)	Cots	Ante- natal	Post- natal
Hopedene	11	3	—	—	—	11	11 weeks	3 weeks
Thorndale	12	16	2	1	17	17	6 weeks	6-8 weeks

These hostels receive a grant from the Health Committee.

## Residential Nurseries

**TABLE D 6**

Name and address of Nursery		Beds provided at the end of year				
		0-9 mths.	10 mths.- 2 years	2-5 years	Girls over 5	Boys over 5
Glendhu Hostel, Holywood Road (A voluntary Hostel; receives a grant from the Health Com- mittee).	Short stay	1	—	6	4	4

## Midwives

During the year 23 midwives were employed on a full-time salaried basis and 8 on a part-time basis. Two hostels are in operation, one at Springfield Road (where there is accommodation for student midwives) and the other at Templemore Avenue. One midwife is resident in a self-contained flat at the Ballymurphy Clinic, where there is also accommodation for a student midwife. The organization of training of student midwives for Part 2 (domiciliary confinements) was completely undertaken by this department. Approved midwives on our staff take students from both Jubilee and Royal Maternity Hospitals and 93 were given training during the year.

The midwives were responsible throughout the year for taking blood from infants for the Guthrie test for phenylketonuria and virtually 100% of the infants had this test carried out. The majority of the midwives attend general practitioners' antenatal clinics, totalling 33 sessions per week and amongst other duties take blood samples from patients and assist with antenatal and postnatal examinations. 23,250 antenatal examinations were done during the year and in this way our midwives are providing the service which was formerly given at the local authority antenatal clinics.

Midwives receive allowances to cover uniform, laundry and travelling expenses, the uniform being that prescribed by the Joint Nursing and Midwives Council. Equipment is issued on loan and all drugs, dressings, etc., in use are supplied to the midwives. Special cots, etc., for the care of premature babies are available but the trend is for these babies to be admitted to special units attached to the two large maternity hospitals in the City. Refresher courses for midwives are arranged from time to time, each midwife attending a course every seven years.

The number of domiciliary confinements attended by midwives during the year dropped to 203. 38,481 visits were paid to 5,374 cases attended after transfer from hospital. It was not found necessary to suspend any midwife from practice during the year to prevent possible spread of infection. No cases of ophthalmia neonatorum or pemphigus neonatorum were notified during the year.

## *Notification of intention of midwives to practice*

**TABLE D 7**

	Domiciliary	Institutions other than hospitals	Hospitals	Nursing homes	Total
Midwives notifying their intention to practice during the year	30	17	260	4	311

Number of cases in which medical aid was summoned by a midwife during the year under Section 34 of the Nurses and Midwives Act (Northern Ireland), 1959 — Nil.

## Maternity Medical Services

General medical practitioners agreeing to provide maternity medical services in domiciliary cases are enrolled on the Obstetric List maintained in the department and are paid on a fee-per-case basis. Both the doctor and the midwife are paid by the Health Committee.

\*The following is a summary of the work carried out under the scheme by medical practitioners during the year:—

**TABLE D 8**

Domiciliary confinements at which General Practitioner attended	192
G.P. Maternity Hospital confinements at which General Practitioner attended	1,554
Women confined at home who were examined ante-natally	190
Ante-natal examinations made of women confined at home	1,599
Women referred to institutions for confinement who were examined ante-natally	2,439
Ante-natal examinations made of women confined in institutions	16,898
Final pelvic examinations made of women confined at home	166
Final pelvic examinations made of women confined in institutions	1,420
Cases of abortion attended	541
Anaesthetics given by second practitioner	1

## Registration of Nursing Homes

**TABLE D 9**

	Number	Beds provided for:—		
		Maternity	Other purposes	Total
Homes first registered during the year	—	—	—	—
Homes on register at end of the year	9	26	81	107

### Action during 1970 :

Number of applications for registration refused	..	..	..	—
Number of exemptions granted	..	..	..	—
Number of exemptions withdrawn	..	..	..	—
Number of registrations cancelled	..	..	..	1
Number of appeals by aggrieved persons to a Court of Summary Jurisdiction	..	..	..	—
Number of cases in which fines were imposed	..	..	..	—
Number of inspections	..	..	..	73
Number of registered homes not inspected	..	..	..	—

The inspections during the year were made by the Clinic Medical Officer, the Chief Nursing Officer, and the Area Superintendent Health Visitors.



# **Infant Mortality and Rates per 1,000 live births by cause and sex, 1970**

**TABLE D 10**

Abbreviated List Nos.	Causes of death	Under 1 month				1-11 months			Total under 1 year	
		M	F	Total	Rate	M	F	Total	No.	Rate
B2	Typhoid fever	—	—	—	—	—	—	—	—	—
B3	Bacillary dysentery and amoebiasis	—	—	—	—	—	—	—	—	—
B4	Enteritis and other diarrhoeal diseases	3	—	3	0.4	8	7	15	18	2.6
B5	Tuberculosis of respiratory system	—	—	—	—	—	—	—	—	—
B6	Other tuberculosis	—	—	—	—	—	—	—	—	—
B8	Diphtheria	—	—	—	—	—	—	—	—	—
B9	Whooping cough	—	—	—	—	—	—	—	—	—
B10	Streptococcal sore throat and scarlet fever	—	—	—	—	—	—	—	—	—
B11	Meningococcal infection	—	—	—	—	1	—	1	1	0.2
B12	Acute poliomyelitis	—	—	—	—	—	—	—	—	—
B14	Measles	—	—	—	—	—	—	—	—	—
B17	Syphilis	—	—	—	—	—	—	—	—	—
B18	Other infective and parasitic diseases	1	—	1	0.2	—	—	—	1	0.2
B19(a-f)	Cancer	—	—	—	—	—	—	—	—	—
B19(g)	Hodgkin's disease	—	—	—	—	—	1	1	1	0.2
B20	Benign and unspecified neoplasms	—	—	—	—	—	—	—	—	—
B21	Diabetes mellitus	—	—	—	—	—	—	—	—	—
B24	Meningitis	2	1	3	0.4	1	1	2	5	0.7
B29	Other forms of heart disease	—	—	—	—	—	—	—	—	—
B30(b)	Cerebrovascular disease without hypertension	—	1	1	0.2	1	—	1	2	0.3
B46(a)	Other diseases of circulatory system	—	—	—	—	—	—	—	—	—
B31	Influenza	—	—	—	—	—	—	—	—	—
B32	Pneumonia	3	—	3	0.4	11	12	23	26	3.8
B33	Bronchitis, emphysema and asthma	—	—	—	—	—	—	—	—	—
B46(b)	Other diseases of respiratory system	—	—	—	—	—	2	2	2	0.3
B36	Intestinal obstruction and hernia	2	1	3	0.4	—	—	—	3	0.4
B46(c)	Other diseases of the digestive system	—	—	—	—	—	—	—	—	—
B42	Congenital anomalies	21	9	30	4.3	9	4	13	43	6.2
B43	Birth injury, etc.	21	16	37	5.4	—	—	—	37	5.4
B44	Other causes of peri-natal mortality	29	19	48	7.0	—	—	—	48	7.0
B45	Symptoms and ill-defined conditions	1	—	1	0.2	—	—	—	1	0.2
B46(d)	All other diseases	—	1	1	0.2	2	1	3	4	0.6
B47	Motor vehicle accidents	—	—	—	—	—	—	—	—	—
B48	All other accidents	—	1	1	0.2	1	1	2	3	0.4
B50	All other external causes	—	—	—	—	—	—	—	—	—
	Totals	83	49	132		34	29	63	195	

**TABLE D 11**

## **Infant Mortality (by age groups)**

	Under 1 day	1-6 days	1-3 weeks	1 month	2 months	3-5 months	6-11 months	Total	Deaths of illegitimate children
Males	43	23	17	5	8	6	15	117	14
Females	29	15	5	4	2	12	11	78	4
Totals	72	38	22	9	10	18	26	195	18

# **Infant and Neo-Natal Mortality Rates, 1885—1970**

**TABLE D 12**

Year	Rate per 1,000 births		Year	Rate per 1,000 births	
	Infant	Neo-natal		Infant	Neo-natal
1885	170	—	1956	29	18
1890	162	—	1957	33	22
1895	169	—	1958	30	19
1900	152	—	1959	33	22
1905	136	—	1960	28	20
1910	143	—	1961	33	23
1915	137	—	1962	29	20
1920	132	—	1963	29	19
1925	104	—	1964	31	20
1930	78	—	1965	27	18
1935	112	—	1966	32	19
1940	122	40	1967	28	17
1945	84	40	1968	31	18
1950	49	25	1969	30	16
1955	37	21	1970	28	19

— indicates information not available

# **Stillbirth and Perinatal Mortality Rates 1936—1970**

**TABLE D 13**

Year	Registered live births	*Stillbirths	Total births	Registered deaths during 1st week	Perinatal deaths	Stillbirth rate	Perinatal mortality rate
1936	9,242	452	9,694	263	715	46.6	73.8
1940	8,704	355	9,059	236	591	39.2	65.2
1945	9,853	303	10,156	225	528	29.8	52.0
1950	8,834	237	9,071	183	420	26.1	46.3
1955	8,100	236	8,336	138	374	28.3	44.9
1956	8,212	248	8,460	121	369	29.3	43.6
1957	8,459	219	8,678	159	378	25.2	43.6
1958	8,263	242	8,505	128	370	28.5	43.5
1959	8,365	183	8,548	160	343	21.4	40.1
1960	8,736	222	8,958	150	372	24.8	41.5
1961	8,806	231	9,037	163	394	25.6	43.6
1962	8,636	225	8,861	141	366	25.4	41.3
1963	8,839	173	9,012	150	323	19.2	35.8
1964	8,719	212	8,931	159	371	23.7	41.5
1965	8,447	150	8,597	137	287	17.5	33.4
1966	8,316	164	8,480	132	296	19.3	34.9
1967	7,997	156	8,153	119	275	19.1	33.7
1968	7,630	160	7,790	118	278	20.5	35.7
1969	7,173	121	7,294	96	217	16.6	29.8
1970	6,916	119	7,035	110	229	16.9	32.6

\* Notified (Belfast addresses) prior to 1961: registered cases since 1961

**Births and Birth rates, Deaths and Death rates per 1,000 births**  
for certain age periods under one year, 1936-1970

**TABLE D 14**

Year	Live births	Birth rate	Under one day		One day and less than 7 days		Under one week		Under four weeks		Under one year	
			Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
1936	9,242	21.2	133	14	130	14	263	28	407	44	933	101
1940	8,704	19.6	115	13	121	14	236	27	350	40	1,065	122
1945	9,853	22.6	92	9	133	13	225	23	391	40	828	84
1950	8,834	19.6	98	11	85	10	183	21	224	25	431	49
1955	8,100	17.8	79	10	59	7	138	17	171	21	300	37
1956	8,212	18.5	62	8	59	7	121	15	146	18	240	29
1957	8,459	19.2	92	11	67	8	159	19	186	22	275	33
1958	8,263	18.9	89	11	39	5	128	15	154	19	251	30
1959	8,365	19.3	103	12	57	7	160	19	182	22	274	33
1960	8,736	20.1	93	11	57	7	150	17	173	20	243	28
1961	8,806	21.1	107	12	56	6	163	19	199	23	287	33
1962	8,636	20.9	90	10	51	6	141	16	172	20	252	29
1963	8,839	21.5	90	10	60	7	150	17	168	19	259	29
1964	8,719	21.3	107	12	52	6	159	18	175	20	266	31
1965	8,447	20.8	83	10	54	6	137	16	152	18	232	27
1966	8,316	20.6	79	9	53	6	132	16	155	19	264	32
1967	7,997	20.1	70	9	49	6	119	15	138	17	226	28
1968	7,630	19.5	65	9	53	7	118	15	141	18	234	31
1969	7,173	18.6	57	8	39	5	96	13	116	15	212	30
1970	6,916	18.0	72	10	38	6	110	16	132	19	195	28

(Full figures for each year from 1936 in Tables D13 and D14 were published in the Annual Report for 1967)

### After Care

During the year Health Visitors continued to supervise cases where cash supplements to cover special dietary requirements are paid to patients by the Supplementary Benefits Commission of the Ministry of Health and Social Services. This work is time consuming but often gives new and valuable contacts with persons who are in need of help and advice and who would otherwise not be known to the Department.

A wide range of equipment is supplied by the Medical Comforts scheme on the recommendation of district nurses, health visitors, hospitals and general practitioners. This includes items such as ripple beds, dunlopillo mattresses, air cushions, bed rests, rubber sheeting, bedpans, commodes, urinals, walking aids, etc., which are available on loan. A large number of incontinence pads are also supplied. During the year 3,279 such issues were made. In addition, there were 4,989 extensions to existing loans (mostly incontinence pads). 1,922 persons returned equipment which they had on loan. The number holding equipment at the end of the year was 4,180. This service does much to facilitate the care of patients in their own homes.

### Home Nursing Service

The home nursing staff consists of 1 Superintendent, 1st and 2nd Assistant Superintendents, 56 Qualified District Nurses, 9 State Registered Nurses, 10 State Enrolled Nurses and 1 part-time District Nurse. 29 Nurses were awarded the National Certificate of District Nursing during the year: of these 10 were Belfast candidates and 19 were County candidates.

Reference to Table D 15 shows an increase in the number of new patients taken on and in the total number of cases treated during the year. The increase of attachment of district nurses to group practices is reflected in the large increase in the number of patients treated at doctors' surgeries. Extensive use was made of the facilities provided by the medical comforts scheme and increasing demands were made on the Marie Curie Fund for extra facilities for cancer patients, such as bedding, clothing, extra nourishment, night sitters, etc. Help was also obtained for cancer patients from the Cancer Relief Fund which has provided grants of money in suitable cases.



TABLE D 15

<b>A.</b> Number of cases:-		
(i)	Brought forward from 1969	12,611
(ii)	New cases taken on during 1970	4,474
	Analysis of new cases:-	
	Tuberculosis	34
	Cancer	256
	Diabetes	88
	Gynaecological	70
	Pneumonia	4
	Surgical	1,055
	General medical	2,967
(iii)	Removed during 1970	2,694
	Causes of removal:-	
	Convalescent	1,254
	Died	360
	To hospital	596
	Other causes	484
	Remaining on books at end of 1970	14,391
<b>B.</b> Analysis of visits to all cases in 1970:-		
	Tuberculosis	2,494
	Cancer	11,844
	Diabetes	26,492
	Gynaecological	1,437
	Pneumonia	26
	Surgical	40,416
	General medical	196,520
	Total visits	279,229
<b>C.</b> Treatment at Doctor's surgeries:-		
	Centres	13
	Patients treated	15,382

### Chiropody

This scheme provides for treatment of the aged, handicapped persons and expectant and nursing mothers. During the year 3,440 sessions were held, 6,063 persons received treatment and the total number of treatments carried out was 21,970 — 13,795 at clinics and 8,157 at patients' homes. The service is still severely limited by the difficulty in recruiting chiropodists. Three students sponsored by the Health Committee are at present in training, but there seems little prospect of being able to provide a service adequate to the needs of the community in the near future.

I wish in conclusion to express my appreciation of the loyal, efficient and untiring service given by all the members of staff during the year.

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*Senior Medical Officer,  
Community Health Division.*

# REPORT OF THE SENIOR MEDICAL OFFICER, SCHOOL HEALTH DIVISION, FOR THE YEAR 1970

## Belfast Grant-Aided Schools

Table E1 shows the various types of grant-aided schools in the County Borough of Belfast at 31st December, 1970, and the numbers of pupils attending them. During the year St. Vincent de Paul Boys' and Girls' School was formed by amalgamation of St. Vincent de Paul Boys' and St. Vincent de Paul Girls' Schools; similarly St. Mary's Star of the Sea Boys' and Girls' School was formed by amalgamation of St. Mary's Star of the Sea Boys' and St. Mary's Star of the Sea Girls' Schools. Roosevelt Street Special Care School and the new Blackmountain County Primary School were added to the list, so that the number of grant-aided schools in the City remains at 192 as in 1969.

The school population at 31st December, 1970, was 80,562, a decrease of 2,253 compared with the end of the previous year.

## Staff

During the summer a vacancy on the medical staff establishment was filled by the appointment of an experienced doctor who had been doing school health work in Africa. The Northern Ireland Hospitals Authority continued to second to the School Health Service on a sessional basis several ophthalmic specialists, a paediatrician and an orthopaedic surgeon. Physiotherapists and occupational therapists were seconded by the Northern Ireland Council for Orthopaedic Development. Several trainee health visitors were seconded to the Health Visitors' Training Course held by the Royal College of Nursing and several more from the previous year's course returned to duty as qualified health visitors. This year for the first time we were able to offer attractive terms to trainee speech therapists. Three girls were seconded to speech therapy training colleges in London and Edinburgh; on completion of the course they are under contract to work for this department for at least two years. Two of these trainees should qualify in June 1973, whilst the third, who is a state registered nurse, hopes to combine the first two years of training and qualify in June 1972.

## Medical Records

For the past few years the records of the Belfast School Health Service have been handled by the Northern Ireland Medical Records Linkage Research Unit, who have provided most of the data tabulated in this report and a great deal of other information in the form of rolls, analyses, tabulations and lists. Our thanks are due to the Director of the Research Unit and his staff for their very efficient services, which are now being extended to cover the whole of Northern Ireland.

## School Medical Inspections

Section 42 of the Education Act (N.I.), 1947, as amended by the Education (Amendment) Act (N.I.), 1956, lays on the local authority's health committee the duties of providing medical and dental inspection and treatment for all pupils attending grant-aided schools in their areas. These duties are carried out by the School Health Service except at the three non-participating schools, which conduct their own schemes of inspection and treatment as provided in Section 42 (6) of the Education (Amendment) Act (N.I.), 1956. Three independent schools (see Part II of the Education Act (N.I.), 1947) with a total enrolment of 220 pupils remain outside the scope of the School Health Service and do not have school medical inspections. Two independent schools, Orange's Academy and Windsor School, were closed during the year.

Table E2 shows the numbers of children examined in various age groups, a total of 19,497. The arrangements for medical inspections continued as in 1969; entrants and ten-year-olds were given a detailed examination by the doctor and health visitor including audiometry and vision tests; the ten-year-olds were also tuberculin tested by the Heaf-gun method and then given B.C.G. vaccination if necessary. Leavers were given a vision test and a medical interview concerning all aspects of health as related to future careers; this interview might be followed by a full or partial examination if this appeared to be necessary.

The number of children examined in the nursery group, 878, exceeds the nursery school population of 665, because some of these were examined more than once in the year. The 2,492 children examined in groups II and V were seen under the selective principle, having been referred by parents, teachers, health visitors, welfare officers and others. Reports were made to the Youth Employment Service on 225 school-leavers. The findings at medical inspections are summarised in tables E3 to E10 and E14.



Re-examination by the medical officers of all defects found on previous occasions continued as usual. Children are added to the re-examination list not only on being found to have defects at school medical inspections, but on the finding of defects at any time at the clinic or elsewhere, or on information from hospitals or doctors; they remain on the list until they are cured or leave school, so that at least an annual review of all defects should take place, followed by appropriate remedial action. The re-examination list includes at any time about a quarter of the school population and in 1970 we reviewed 25,209 defects in 18,104 children for appropriate action. The findings at re-examination are summarised in tables E12 and E14. Where a child due for routine medical inspection also appears on the re-examination list the routine inspection replaces the re-examination and in the tables a child is not included in both categories of examination. The total of inspections and re-examinations in schools was 37,601 for the year, nearly half the school population. In addition 16,551 attendances to see the doctors at school clinics occurred and the findings are summarised in tables E13 and E14.

### **Attendance of Parents at School Medical Inspections**

Table E3 shows the numbers of parents who attended school medical inspections; as usual the attendance of parents was high with entrants and low with the older children and more attended with girls than with boys. There was a fall from 40% attendance by parents in 1969 to 36% this year.

### **Action to be taken as a result of Routine Medical Inspections**

Table E4 shows a summary of the action found to be necessary by the school doctors as a result of school medical inspections; as usual considerable numbers of apparently healthy children were found in need of attention not already being provided.

### **History of Infectious Disease in Schoolchildren**

Before a school medical inspection the parent is asked to complete a questionnaire about the child's past and present health. Table E5 shows the numbers and percentages at various ages giving a history of having had certain infectious diseases. The older the child the longer has been his exposure to risk of infection and, as expected, the percentages said to have had each disease rise from entrants to leavers. Some examples of the rates in entrants and leavers respectively are: measles 75%, 90%; rubella 18%, 37%; chicken-pox 26%, 61%; scarlet fever 4%, 9%; mumps 33%, 51%; whooping cough 26%, 35%. The true rates for rubella, or German measles, are probably much higher because the disease is easily confused with measles or other diseases with a rash and it is often mild and may pass unnoticed or be forgotten; this is of practical importance, since it is desirable for girls of child-bearing age to have had rubella and thus be immune to further attacks during pregnancy, with a high risk of damage to the unborn child. During this year immunisation against rubella became available for the first time and was offered to girls aged thirteen years. The rates for scarlet fever are much lower than in former years and this is now usually a mild disease. Chorea and rheumatic fever are now fairly rare. A history of diphtheria is given for twenty-one children of various ages, but most of these parents must be mistaken, for this disease is now very rare and we have not had nearly that number of cases here during the relevant period.

### **Heights and Weights**

Table E6 shows the mean heights and weights of the children who had full medical examinations in 1970. The standard error of the mean, the standard deviation and the co-efficient of variation are also given and all the data are recorded in metric and in imperial units.

Pupils interviewed or partially examined are not weighed and measured, so that the numbers of Group IV children in this table are considerably fewer than shown in table E2. The 968 pupils examined at special schools are also excluded from the table; at all ages their mean heights and weights are considerably lower than those of children at normal schools and this will be the subject of a separate report elsewhere.

### **Defects Discovered at Medical Inspections**

The defects found at medical inspections in 1970 are shown in table E7; the rates per thousand having the various defects are not markedly different from those noted during the past few years. This table is in accordance with the classification of diseases used both here and in Great Britain for



school health records; this classification is based partly on the body systems—though it is incomplete in this respect—and partly on certain diseases. Table E14 shows the same defects and diseases according of the 18 main and 94 subsidiary headings of the International Classification of Diseases.

## **Vision**

Table E8 shows the visual acuity in right and left eyes of the children tested at medical inspections. It does not include the 6,388 children whose visual acuity was screened by health visitors at school. Part (a) of the table shows the acuity without glasses and part (b) the corrected acuity of those children who had glasses at the time of the test. The visual acuity of 573 children could not be accurately assessed because of immaturity or unco-operation. Children with defective or doubtful vision are followed up and given appropriate treatment. The eyes of all children need to be checked at intervals to look for refractive errors and if glasses are worn an annual test is desirable. At the school clinics this year 5,667 children had the refraction of their eyes tested under a mydriatic to determine the need for glasses or a change of lenses; 3,422 of these had a second test after the effects of the mydriatic had worn off.

Squints were found in about 32 per thousand young Belfast children. This year 325 squinting children were referred to hospital for orthoptic advice and treatment, including in some cases an operation to straighten the eye.

Table E10 shows the prevalence of defective colour vision in schoolchildren. About one in twenty boys is found to have a gross defect of colour discrimination and this is one of the items that must be considered by the medical staff when advising about careers for school-leavers.

The rapid repair service for broken glasses was continued and in 1970 urgent repair or replacement of about 900 pairs of glasses was made.

## **Tuberculin Tests and B.C.G. Vaccination**

Table E11 gives the results of tuberculin tests; 7.3% of children not previously vaccinated with B.C.G. and 87.4% of vaccinated children gave positive reactions. The negative reactors of about ten years and over are offered B.C.G. vaccination; this year 4,621 young people were vaccinated at school clinics and 2,110 at hospitals and other places.

## **Handicapped Pupils**

Table E15 shows the numbers of educational handicaps affecting Belfast children over two years of age at 31st December, 1970. Many children are affected by several handicapping conditions simultaneously, and this table refers to 4,923 handicaps in 3,904 children. Table E16 shows the numbers of children with a single handicap and tables E17 and E18 show those with two or more. Table E20 shows the various disabilities affecting children attending the Fleming Fulton School for physically handicapped pupils at the end of 1970. Table E21 shows the number of children admitted to Cedar Lodge School for delicate pupils during 1970 and the disabilities causing their admission.

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# Belfast Grant-Aided Schools

TABLE E 1

Type of School		Number	Pupils
Nursery schools and classes		15	655
Primary	County Primary Schools	62	24,260
	Maintained Voluntary Primary Schools	20	9,451
	Voluntary Primary Schools under Roman Catholic management	34	9,289
	Special Schools	10	1,126
	Day Instruction Centres	5	426
Secondary	County Secondary Schools	16	12,180
	County Grammar Schools	3	2,184
	Maintained Voluntary Secondary Schools	11	7,501
	Voluntary Secondary Schools	2	1,383
	Voluntary Grammar Schools †(Participating)	11	9,590
	Voluntary Grammar Schools †(Non-participating)††	3	2,507
Total		192	80,562

†† These schools conduct their own schemes of medical and dental inspection and treatment under the provision of Section 42 (6) of the Education (Amendment) Act (N.I.), 1956.

† Includes preparatory school in most cases.

## School Medical Inspections

TABLE E 2

Type of school	Sex	System of examination	Age Groups								Re-examinations	Totals
			Nursery	I	II	III	IV inter- view	IV exam- ination	V	Totals		
Nursery	Boys	Routine	410	—	—	—	—	—	—	410	—	410
	Girls		426	—	—	—	—	—	—	426	—	426
Primary	Boys	Selective	—	3,236	1,020	2,059	—	—	—	6,315	6,325	12,640
	Girls		—	2,701	975	1,882	—	—	—	5,558	5,155	10,713
Secondary	Boys	Selective	—	—	—	—	1,191	819	4	2,014	2,459	4,473
	Girls		—	—	—	3	1,064	649	3	1,719	2,133	3,852
Preparatory	Boys	Selective	—	88	54	181	—	—	—	323	236	559
	Girls		—	161	67	138	—	—	—	366	61	427
Grammar	Boys	Selective	—	—	—	—	166	465	—	631	862	1,493
	Girls		—	—	—	—	200	429	138	767	873	1,640
Special	Boys	Routine	29	61	134	223	—	226	27	700	—	700
	Girls		13	48	56	67	—	70	14	268	—	268
Totals	Both	Both	878	6,295	2,306	4,553	2,621	2,658	186	19,497	18,104	37,601

Attendance of Parents at Routine Medical Inspections

TABLE E 3

Age Group	Boys		Girls	
	No.	%	No.	%
Nursery	66	16.1	71	16.7
Entrants	2,306	68.1	2,092	71.9
II	419	34.7	511	46.5
III	645	26.2	848	40.6
IV	36	1.2	32	1.5
V	1	3.2	—	—
Totals	3,473	33.4	3,554	39.0
		7,027 (36.0)		



TABLE E 4  
Action to be taken as a result of Routine Medical Inspection

Age Group	Home visits		To Family Doctor		To School Clinic		To Eye Specialist		To E.N.T. Specialist		To Hospital		To Physio-therapist		To Speech Therapist		To Audio-metrist		Other action	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Nursery	3	4	5	2	4	5	10	5	—	1	—	1	3	1	—	—	—	—	—	1
Entrants	64	39	167	96	187	160	253	171	11	2	30	12	60	40	40	18	37	34	35	37
II	14	7	26	23	65	50	80	84	3	4	12	8	15	10	8	5	16	10	18	11
III	46	28	59	39	152	112	137	149	1	6	17	12	33	19	13	3	20	16	36	27
IV Interview	11	9	15	10	16	12	85	85	—	—	4	1	—	—	5	—	1	—	8	5
Examination	16	7	55	29	58	70	95	83	3	2	15	5	11	17	10	1	14	10	23	18
V	—	—	—	1	—	—	3	2	—	—	—	—	—	—	—	—	1	—	—	2
Totals	154	94	327	200	482	409	663	579	18	15	78	39	122	87	76	27	89	70	120	101
	248		527		891		1,242		33		117		209		103		159		221	

TABLE E 5  
History of Infectious Diseases

Age group		Number examined		Number and percentage giving history of																	
				Measles		German measles		Chicken-pox		Scarlet fever		Diphtheria		Mumps		Whooping cough		Chorea		Rheumatic fever	
				No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Nursery Entrants II III IV V	878	280	31.9	36	4.1	60	6.8	10	1.1	1	0.10	82	9.3	60	6.8	—	—	—	—	—	—
	6,295	4,702	74.7	1,160	18.4	1,647	26.2	265	4.2	6	0.09	2,085	33.1	1,662	26.4	3	0.05	4	0.06	—	—
	2,306	2,005	87.0	740	32.1	1,227	53.2	181	7.9	4	0.20	968	42.0	629	27.3	1	0.04	3	0.10	—	—
	4,553	4,044	88.8	1,536	33.7	2,551	56.0	360	7.9	3	0.07	1,986	43.6	1,354	29.7	13	0.30	12	0.30	—	—
	5,279	4,733	89.7	1,960	37.1	3,196	60.5	451	8.5	7	0.10	2,665	50.5	1,836	34.8	6	0.10	36	0.70	—	—
	186	174	93.6	76	40.9	135	72.6	15	8.1	—	—	98	52.7	79	42.5	—	—	—	—	—	—
Totals	19,497	15,938	81.8	5,508	28.3	8,816	45.2	1,282	6.6	21	0.10	7,884	40.4	5,620	27.0	23	0.10	55	0.30	—	—







# Defects Discovered at Routine Medical Inspection

TABLE E 7

Defect		Age Group	Defective for treatment	Per 1,000	Defective for observation	Per 1,000	Total defective	Per 1,000
Skin		Entrants	22	3.5	136	21.6	158	25.1
		Leavers	38	7.2	93	17.6	131	24.8
		Other ages	22	2.8	119	15.0	141	17.8
		Total	82	4.2	348	17.9	430	22.1
Eyes	(a) vision	Entrants	374	59.4	1,638	260.2	2,012	319.6
		Leavers	471	89.2	1,341	254.0	1,812	343.3
		Other ages	614	77.5	1,902	240.1	2,516	317.6
		Total	1,459	74.9	4,881	250.4	6,340	325.2
	(b) squint	Entrants	141	22.4	184	29.2	325	51.6
		Leavers	21	4.0	66	12.5	87	16.5
		Other ages	59	7.5	156	19.7	215	27.1
		Total	221	11.3	406	20.8	627	32.2
	(c) other	Entrants	24	3.8	34	5.4	58	9.2
		Leavers	18	3.4	36	6.8	54	10.2
		Other ages	22	2.8	70	8.8	92	11.6
		Total	64	3.3	140	7.2	204	10.5
Ears	(a) hearing	Entrants	135	21.5	222	35.3	357	56.7
		Leavers	72	13.6	71	13.5	143	27.1
		Other ages	150	18.9	207	26.1	357	45.1
		Total	357	18.3	500	25.7	857	44.0
	(b) otitis media	Entrants	21	3.3	82	13.0	103	16.4
		Leavers	25	4.7	14	2.7	39	7.4
		Other ages	19	2.4	53	6.7	72	9.1
		Total	65	3.3	149	7.6	214	11.0
	(c) other	Entrants	11	1.8	64	10.2	75	11.9
		Leavers	13	2.5	7	1.3	20	3.8
		Other ages	31	3.9	35	4.4	66	8.3
		Total	55	2.8	106	5.4	161	8.3
Nose and throat		Entrants	95	15.1	825	131.1	920	146.2
		Leavers	34	6.4	134	25.4	168	31.8
		Other ages	47	5.9	453	57.2	500	63.1
		Total	176	9.0	1,412	72.4	1,588	81.5
Speech		Entrants	62	9.9	172	27.3	234	37.2
		Leavers	16	3.0	47	8.9	63	11.9
		Other ages	38	4.8	165	20.8	203	25.6
		Total	116	6.0	384	19.7	500	25.7
Cervical glands		Entrants	9	1.4	228	36.2	237	37.7
		Leavers	3	0.6	9	1.7	12	2.3
		Other ages	3	0.4	53	6.7	56	7.1
		Total	15	0.8	290	14.9	305	15.6
Heart and circulation		Entrants	118	18.8	168	26.7	286	45.4
		Leavers	24	4.6	68	12.9	92	17.4
		Other ages	60	7.6	172	21.7	232	29.3
		Total	202	10.4	408	20.9	610	31.3
Lungs	(a)	Entrants	105	16.7	273	43.4	378	60.1
		Leavers	22	4.2	121	22.9	143	27.1
		Other ages	58	7.3	216	27.3	274	34.6
		Total	185	9.5	610	31.3	795	40.8
	(b) pulmonary tuberculosis	Entrants	—	—	—	—	—	—
		Leavers	—	—	2	0.4	2	0.4
		Other ages	—	—	2	0.3	2	0.3
		Total	—	—	4	0.2	4	0.2
Development		Entrants	86	13.7	448	71.2	534	84.8
		Leavers	64	12.1	52	9.9	116	22.0
		Other ages	158	19.9	164	20.7	322	40.6
		Total	308	15.8	664	34.1	972	49.9

**TABLE E 7 (continued)**

Defect	Age Group	Defective for treatment	Per 1,000	Defective for observation	Per 1,000	Total defective	Per 1,000
Orthopaedic (a) posture	Entrants	11	1.8	9	1.4	20	3.2
	Leavers	11	2.1	9	1.7	20	3.8
	Other ages	17	2.1	6	0.8	23	2.9
	Total	39	2.0	24	1.2	63	3.2
	(b) feet	Entrants	127	148	23.5	275	43.7
		Leavers	17	24	4.6	41	7.8
		Other ages	105	95	12.0	200	25.2
		Total	249	267	13.7	516	26.5
	(c) other	Entrants	47	136	21.6	183	29.1
		Leavers	17	50	9.5	67	12.7
		Other ages	30	101	12.8	131	16.5
		Total	94	287	14.7	381	19.5
Nervous system (a) epilepsy	Entrants	1	0.2	15	2.4	16	2.5
	Leavers	9	1.7	30	5.7	39	7.4
	Other ages	3	0.4	38	4.8	41	5.2
	Total	13	0.7	83	4.3	96	4.9
	(b) other	Entrants	7	82	13.0	89	14.1
		Leavers	11	69	13.1	80	15.2
		Other ages	13	130	16.4	143	18.0
		Total	31	281	14.4	312	16.0
	Psychological (a) development	Entrants	20	78	12.4	98	15.6
		Leavers	2	171	32.4	173	32.8
		Other ages	38	473	59.7	511	64.5
		Total	60	722	37.0	782	40.1
	(b) stability	Entrants	91	110	17.5	201	31.9
		Leavers	10	62	11.8	72	13.6
		Other ages	48	93	11.7	141	17.8
		Total	149	265	13.6	414	21.2
Tuberculosis—non-pulmonary	Entrants	—	—	1	0.2	1	0.2
	Leavers	—	—	2	0.4	2	0.4
	Other ages	—	—	—	—	—	—
	Total	—	—	3	0.2	3	0.2
Other defects	Entrants	87	13.8	118	18.8	205	32.6
	Leavers	39	7.4	82	15.5	121	22.9
	Other ages	83	10.5	144	18.2	227	28.7
	Total	209	10.7	344	17.6	553	28.4

The numbers of children seen were:—Entrants, 6,295; Leavers, 5,279; Other ages, 7,923; Total 19,497.

The visual acuity could not be accurately assessed in 573 entrants; in this table these are included in "Eyes (a) vision" among the 1,638 defective for observation.

Visual Acuity

TABLE E 8

(a) schoolchildren without glasses

	Left eye								Right eye
	Visual acuity	6/6	6/9	6/12	6/18	6/24	6/36	6/60	<6/60 Totals
Right eye	6/6	13,001	843	153	82	59	45	26	7 14,216
	6/9	604	1,509	208	79	33	28	5	4 2,470
	6/12	157	195	436	114	33	19	8	2 964
	6/18	74	75	111	164	59	16	3	2 504
	6/24	34	41	28	53	98	29	5	— 288
	6/36	49	29	23	24	36	120	12	— 293
Left eye	6/60	23	7	10	5	8	19	71	6 149
	<6/60	6	3	1	1	2	1	2	24 40
	Totals	13,948	2,702	970	522	328	277	132	45 18,924

(b) schoolchildren with glasses

	Left eye								Right eye
	Visual acuity	6/6	6/9	6/12	6/18	6/24	6/36	6/60	<6/60 Totals
Right eye	6/6	586	106	38	24	9	9	2	2 776
	6/9	114	198	59	16	9	4	—	— 400
	6/12	43	64	90	19	6	5	1	— 228
	6/18	19	10	21	31	4	1	—	— 86
	6/24	13	11	3	7	7	1	—	— 42
	6/36	5	4	1	3	2	1	1	— 17
Left eye	6/60	3	—	1	—	—	—	—	— 4
	<6/60	—	—	1	—	—	—	—	— 1
	Totals	783	393	214	100	37	21	4	2 1,554



# Nutrition

TABLE E 9

Age Group	NORMAL (A)				SUB-NORMAL (B)				BAD (C)			
	Boys		Girls		Boys		Girls		Boys		Girls	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Nursery	232	94.3	228	93.8	14	5.7	13	5.4	—	—	2	0.80
Entrants	3,417	95.7	2,995	96.5	150	4.2	102	3.3	5	0.1	6	0.20
II	1,124	93.4	1,057	96.7	76	6.3	34	3.1	4	0.3	2	0.20
III	2,343	95.5	2,023	97.3	109	4.4	54	2.6	2	0.1	3	0.10
IV	2,295	98.1	1,874	98.7	41	1.8	22	1.2	3	0.1	2	0.10
V	28	90.3	152	98.1	3	9.7	3	1.9	—	—	—	—
Totals	9,439	95.9	8,329	97.2	393	4.0	228	2.7	14	0.1	15	0.10

# Colour Vision

TABLE E 10

Colour Vision	Boys		Girls		Total	
Normal	5,718	(92.6%)	5,458	(98.7%)	11,176	(95.5%)
Defective—safe	197	(3.2%)	58	(1.1%)	255	(2.2%)
Defective—unsafe	257	(4.2%)	12	(0.2%)	269	(2.3%)
Totals	6,172		5,528		11,700	

# Tuberculin Tests

TABLE E 11

Age	Unvaccinated persons						Vaccinated persons					
	Tested	Negative		Positive		Number vac-cinated	Tested	Negative		Positive		Number vac-cinated
		No.	%	No.	%			No.	%	No.	%	
0-4	48	45	93.8	3	6.2	1,883	5	—	—	5	100.0	—
5	10	9	90.0	1	10.0	9	1	—	—	1	100.0	—
6	17	17	100.0	—	—	17	3	—	—	3	100.0	—
7	6	6	100.0	—	—	6	—	—	—	—	—	—
8	42	41	97.6	1	2.4	41	1	—	—	1	100.0	—
9	799	761	95.2	38	4.8	761	207	42	20.3	165	79.7	42
10	2,350	2,213	94.2	137	5.8	2,213	657	118	18.0	539	82.0	118
11	785	721	91.8	64	8.2	721	226	17	7.5	209	92.5	17
12	66	61	92.4	5	7.6	61	69	4	5.8	65	94.2	4
13	79	66	83.5	13	16.5	66	108	5	4.6	103	95.4	5
14	436	376	86.2	60	13.8	376	505	59	11.7	446	88.3	59
15	168	150	89.3	18	10.7	150	225	8	3.6	217	96.40	8
16	11	11	100.0	—	—	11	9	—	—	9	100.0	—
17-21	135	120	88.9	15	11.1	120	19	3	15.8	16	84.2	3
22+	48	38	79.2	10	20.8	38	10	2	20.0	8	80.0	2
Totals	5,000	4,635	92.7	365	7.3	6,473	2,045	258	12.6	1,787	87.4	258

# Re-examinations

TABLE E 12

Defects for which re-examined	For treatment	For observation	Cured	Totals
Skin	37	210	151	398
Eyes (a) vision	2,153	6,907	1,839	10,899
(b) squint	131	412	12	555
(c) other	43	82	65	190
Ears (a) hearing	722	863	557	2,142
(b) otitis media	71	100	63	234
(c) other	78	85	138	301
Nose and throat	139	1,162	1,001	2,302
Speech	196	471	284	951
Cervical glands	8	134	86	228
Heart and circulation	163	528	283	974
Lungs (a)	113	658	393	1,164
(b) pulmonary tuberculosis	—	16	4	20
Development	391	427	346	1,164
Orthopaedic (a) posture	9	30	34	73
(b) feet	159	269	197	625
(c) other	38	221	149	408
Nervous system (a) epilepsy	21	74	4	99
(b) other	38	104	66	208
Psychological (a) development	173	764	74	1,011
(b) stability	189	293	184	666
Tuberculosis—non-pulmonary	1	3	4	8
Other defects	105	236	248	589
Totals	4,978	14,049	6,182	25,209

25,209 defects in 18,104 children (primary 11,777 and secondary 6,327)

# Clinic Examinations

TABLE E 13

Reason for examination	Number of examinations	Per cent
Skin	1,008	6.28
Eyes (a) vision	270	1.68
(b) squint	44	0.27
(c) other	101	0.63
Ears (a) hearing	1,573	9.80
(b) otitis media	101	0.63
(c) other	147	0.92
Nose and throat	337	2.10
Speech	162	1.01
Cervical glands	36	0.22
Heart and circulation	234	1.46
Lungs (a)	286	1.78
(b) pulmonary tuberculosis	—	—
Development	214	1.33
Orthopaedic (a) posture	8	0.05
(b) feet	105	0.65
(c) other	86	0.54
Nervous system (a) epilepsy	25	0.16
(b) other	50	0.31
Psychological (a) development	417	2.60
(b) stability	254	1.58
Tuberculosis—non-pulmonary	—	—
Other defects	484	3.02
B. C. G. vaccination	4,621	28.79
Tuberculin skin test	2,714	16.91
Pre-anaesthetic examination	3,274	20.40
Total	16,551	100.00

TABLE E 14

International Classification of Diseases (8th Edition)		Children found affected at		
Code numbers	Categories	Routine medical inspections	Re-examinations	Casual examinations in clinics
	<i>I. Infective and Parasitic Diseases</i>			
000-009	Intestinal infectious diseases	4	1	—
010-019	Tuberculosis	7	29	—
020-027	Zoonotic bacterial diseases	—	—	—
030-039	Other bacterial diseases	—	1	—
040-046	Poliomyelitis and other enterovirus diseases of central nervous system	18	15	1
050-057	Viral diseases accompanied by exanthem	4	3	1
060-068	Arthropod-borne viral diseases	—	—	—
070-079	Other viral diseases	110	102	1
080-089	Rickettsioses and other arthropod-borne diseases	—	1	—
090-099	Syphilis and other venereal diseases	1	—	—
100-104	Other spirochaetal diseases	—	1	—
110-117	Mycoses	15	23	2
120-129	Helminthiases	—	2	—
130-136	Other infective and parasitic diseases	110	22	1
	<i>Total</i>	269	200	5
	<i>II. Neoplasms</i>			
140-149	Malignant neoplasm of buccal cavity and pharynx	—	—	—
150-159	Malignant neoplasm of digestive organs and peritoneum	—	—	—
160-163	Malignant neoplasm of respiratory system	—	—	—
170-174	Malignant neoplasm of bone, connective tissue, skin and breast	—	—	—
180-189	Malignant neoplasm of genito-urinary organs	—	—	—
190-199	Malignant neoplasm of other and unspecified sites	—	—	—
200-209	Neoplasm of lymphatic and haematopoietic tissue	2	—	—
210-228	Benign neoplasms	23	31	—
230-239	Neoplasm of unspecified nature	13	12	—
	<i>Total</i>	38	43	—
	<i>III. Endocrine, Nutritional and Metabolic Diseases</i>			
240-246	Disease of thyroid gland	6	9	—
250-258	Diseases of other endocrine glands	11	15	—
260-269	Avitaminoses and other nutritional deficiency	57	117	3
270-279	Other metabolic diseases	312	365	1
	<i>Total</i>	386	506	4
	<i>IV. Diseases of Blood and Blood-forming Organs</i>			
280-289	<i>Total</i>	372	408	10
	<i>V. Mental Disorders</i>			
290-299	Psychoses	7	—	—
300-309	Neuroses, personality disorders and other non-psychotic mental disorders	675	848	61
310-315	Mental retardation	780	1,008	50
	<i>Total</i>	1,462	1,856	111



TABLE E 14 (contd.)

International Classification of Diseases (8th Edition)		Children found affected at		
Code numbers	Categories	Routine medical inspections	Re-examinations	Casual examinations in clinics
<i>VI. Diseases of the Nervous System and Sense Organs</i>				
320-324	Inflammatory diseases of central nervous system	4	3	2
330-333	Hereditary and familial diseases of nervous system	14	5	—
340-349	Other diseases of central nervous system	249	188	10
350-358	Diseases of nerves and peripheral ganglia	5	3	—
360-369	Inflammatory diseases of the eye	91	105	3
370-379	Other diseases and conditions of eye	7,061	11,537	2,369
380-389	Diseases of the ear and mastoid process	1,223	2,656	336
	<i>Total</i>	<i>8,647</i>	<i>14,497</i>	<i>2,720</i>
<i>VII. Diseases of the Circulatory System</i>				
390-392	Active rheumatic fever	20	18	2
393-398	Chronic rheumatic heart disease	—	—	—
400-404	Hypertensive disease	4	—	—
410-414	Ischaemic heart disease	—	—	—
420-429	Other forms of heart disease	475	660	15
430-438	Cerebrovascular disease	—	1	—
440-448	Diseases of arteries, arterioles and capillaries	4	4	—
450-458	Diseases of veins and lymphatics, and other diseases of circulatory system	6	3	—
	<i>Total</i>	<i>509</i>	<i>686</i>	<i>17</i>
<i>VIII. Diseases of the Respiratory System</i>				
460-466	Acute respiratory infections (except influenza)	84	84	5
470-474	Influenza	2	1	—
480-486	Pneumonia	1	1	1
490-493	Bronchitis, emphysema and asthma	770	1,109	50
500-508	Other diseases of upper respiratory tract	1,509	2,184	31
510-519	Other diseases of respiratory system	13	35	1
	<i>Total</i>	<i>2,379</i>	<i>3,414</i>	<i>88</i>
<i>IX. Diseases of the Digestive System</i>				
520-529	Diseases of oral cavity, salivary glands and jaws	217	285	1
530-537	Diseases of oesophagus, stomach and duodenum	11	16	1
540-543	Appendicitis	1	5	—
550-553	Hernia of abdominal cavity	39	29	—
560-569	Other diseases of intestine and peritoneum	7	10	1
570-577	Diseases of liver, gallbladder and pancreas	2	—	—
	<i>Total</i>	<i>277</i>	<i>345</i>	<i>3</i>
<i>X. Diseases of Genito-Urinary System</i>				
580-584	Nephritis and nephrosis	7	7	1
590-599	Other diseases of urinary system	46	47	10
600-607	Diseases of male genital organs	18	13	—
610-616	Diseases of breast, ovary, fallopian tube and parametrium	3	1	—
620-629	Diseases of uterus and other female genital organs	7	13	—
	<i>Total</i>	<i>81</i>	<i>81</i>	<i>11</i>
<i>XII. Diseases of the Skin and Subcutaneous Tissue</i>				
680-686	Infections of skin and subcutaneous tissue	36	44	1
690-698	Other inflammatory conditions of skin and subcutaneous tissue	208	207	6
700-709	Other diseases of skin and subcutaneous tissue	177	104	5
	<i>Total</i>	<i>421</i>	<i>355</i>	<i>12</i>

TABLE E 14 (contd.)

Code numbers	International Classification of Diseases (8th Edition)  Categories	Children found affected at		
		Routine medical inspections	Re-examinations	Casual examinations in clinics
	<i>XIII. Diseases of the Musculoskeletal System and Connective Tissue</i>			
710-718	Arthritis and rheumatism, except rheumatic fever	35	39	4
720-729	Osteomyelitis and other diseases of bone and joint	39	34	8
730-738	Other diseases of musculoskeletal system	765	899	26
	<i>Total</i>	839	972	38
740-759	<i>XIV. Congenital Anomalies</i>			
	<i>Total</i>	892	877	25
760-779	<i>XV. Certain Causes of Perinatal Morbidity and Mortality</i>			
	<i>Total</i>	2	2	—
	<i>XVI. Symptoms and Ill-defined Conditions</i>			
780-789	Symptoms referable to systems or organs	638	1,072	98
790-796	Senility and ill-defined diseases	36	62	4
	<i>Total</i>	674	1,134	102
	<i>NXVII. Accidents, Poisonings and Violence (Nature of Injury)</i>			
N800-N809	Fracture of skull, spine and trunk	3	2	—
N810-N819	Fracture of upper limb	12	14	—
N820-N829	Fracture of lower limb	1	8	1
N830-N839	Dislocation without fracture	4	1	—
N840-N848	Sprains and strains of joints and adjacent muscles	2	4	—
N850-N854	Intracranial injury (excluding those with skull fracture)	1	4	1
N860-N869	Internal injury of chest, abdomen and pelvis	—	1	—
N870-N879	Laceration and open wound of head, neck and trunk	6	2	—
N880-N887	Laceration and open wound of upper limb	1	—	—
N890-N897	Laceration and open wound of lower limb	1	—	—
N900-N907	Laceration and open wound of multiple location	1	—	1
N910-N918	Superficial injury	1	2	—
N920-N929	Contusion and crushing with intact skin surface	4	2	—
N930-N939	Effects of foreign body entering through orifice	11	5	—
N940-N949	Burn	3	7	—
N950-N959	Injury to nerves and spinal cord	2	—	—
N960-N979	Adverse effect of medicinal agents	1	—	—
N980-N989	Toxic effect of substances chiefly non-medicinal as to source	—	—	—
N990-N999	Other adverse effects	85	85	11
	<i>Total</i>	139	137	14
	<i>Supplementary Classifications</i>			
Y04	Investigation of respiratory system	—	6	—
Y06-9	Investigation of genito-urinary system	1	1	—
Y08	Investigation of musculoskeletal system	—	—	1
Y30-Y39	Medical and surgical aftercare without current complaint or sickness	4	13	—
Y40-Y49	Persons undergoing preventive measures	3	9	—
	<i>Total</i>	8	29	1
	<i>Grand Totals</i>	17,395	25,442	3,161

TABLE E 15

Special Educational Treatment

Handicap	At special day school		At special residential school		At normal school		At no school		At home tuition		Totals	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Blind	3	5	2	3	—	—	—	3	—	—	5	11
Partially sighted	18	15	4	2	13	17	3	4	1	—	39	38
Deaf	10	7	—	3	—	—	—	—	—	—	10	10
Partially hearing	34	36	9	5	249	218	5	7	—	—	297	266
Educationally subnormal	373	252	28	6	513	319	80	32	2	—	996	609
Epileptic	32	22	2	3	61	53	9	5	—	2	104	85
Maladjusted	95	59	34	5	82	53	15	7	1	3	227	127
Physically handicapped	86	68	7	4	142	84	26	23	7	3	268	182
Speech defect	192	82	4	3	686	277	49	25	2	—	933	387
Delicate	70	38	16	7	89	79	11	11	3	5	189	140
Total handicaps	913	584	106	41	1,835	1,100	198	117	16	13	3,068	1,855
	1,497		147		2,935		315		29		4,923	
Total pupils	533	360	68	33	1,631	1,000	160	96	12	11	2,404	1,500
	893		101		2,631		256		23		3,904	

4,923 handicaps in 3,904 pupils (2,404 boys; 1,500 girls). Of these 638 children have 2 handicaps, 168 have 3 handicaps and 15 have 4 handicaps.

TABLE E 16

Single Handicaps

Number of children affected	Handicap
13	Blind
57	Partially sighted
18	Deaf
434	Partially hearing
933	Educationally sub-normal
98	Epileptic
56	Maladjusted
316	Physically handicapped
897	Speech defect
261	Delicate
3,083	Total



# Dual Handicaps

TABLE E 17

Handicap	Blind	Partially sighted	Deaf	Partially hearing	E.S.N.	Epileptic	Maladjusted	Physically handicapped	Speech defect	Delicate
Delicate	1	1	—	3	14	5	12	4	12	52
Speech defect	—	—	—	30	198	7	8	23	278	
Physically handicapped	—	4	1	10	34	1	5	82		
Maladjusted	—	—	—	4	168	5	202			
Epileptic	—	—	—	—	35	53				
E. S. N.	2	11	1	39	502					
Partially hearing	—	—	—	86						
Deaf	—	—	2							
Partially sighted	—	16								
Blind	3									

Showing the distribution of 1,276 handicaps among the 638 children who have two handicaps.

# Multiple Handicaps

TABLE E 18

Number of children affected	Categories of handicaps coinciding			
	First	Second	Third	
1	P. sighted	P. hearing	Speech defect	
1	P. sighted	E.S.N.	Speech defect	
1	P. sighted	E.S.N.	Maladjusted	
1	P. sighted	Epileptic	P. handicapped	
17	P. hearing	E.S.N.	Speech defect	
2	P. hearing	E.S.N.	Delicate	
1	P. hearing	E.S.N.	Epileptic	
6	P. hearing	E.S.N.	Maladjusted	
3	P. hearing	E.S.N.	P. handicapped	
1	P. hearing	Maladjusted	Speech defect	
3	P. hearing	P. handicapped	Speech defect	
1	P. hearing	Speech defect	Delicate	
2	E.S.N.	Speech defect	Delicate	
14	E.S.N.	Epileptic	Speech defect	
1	E.S.N.	Epileptic	Delicate	
10	E.S.N.	Epileptic	Maladjusted	
2	E.S.N.	Epileptic	P. handicapped	
57	E.S.N.	Maladjusted	Speech defect	
5	E.S.N.	Maladjusted	Delicate	
3	E.S.N.	Maladjusted	P. handicapped	
30	E.S.N.	P. handicapped	Speech defect	
1	Epileptic	Maladjusted	P. handicapped	
1	Epileptic	Maladjusted	Speech defect	
2	Epileptic	P. handicapped	Speech defect	
1	Epileptic	P. handicapped	Delicate	
1	Maladjusted	P. handicapped	Speech defect	
168	Total with triple handicaps			
	First	Second	Third	Fourth
1	P. hearing	E.S.N.	Epileptic	Maladjusted
5	P. hearing	E.S.N.	Maladjusted	Speech defect
1	P. hearing	E.S.N.	P. handicapped	Speech defect
1	P. hearing	E.S.N.	Speech defect	Delicate
2	E.S.N.	Epileptic	Maladjusted	Speech defect
1	E.S.N.	Epileptic	P. handicapped	Speech defect
1	E.S.N.	Maladjusted	Speech defect	Delicate
1	E.S.N.	Maladjusted	P. handicapped	Speech defect
2	E.S.N.	P. handicapped	Speech defect	Delicate
15	Total with quadruple handicaps			

Intelligence Quotients of E.S.N. Pupils

TABLE E 19

I.Q.	<45	45-	50-	55-	60-	65-	70-	75-	80-	90-	100-	110-	120+	Totals
Boys	9	8	19	46	68	90	121	137	287	130	66	12	3	996
Girls	1	6	14	30	55	65	79	85	166	68	31	8	1	609
Both	10	14	33	76	123	155	200	222	453	198	97	20	4	1,605

Fleming Fulton School

TABLE E 20

Reasons for admission	Belfast pupils			Other pupils		
	Boys	Girls	Total	Boys	Girls	Total
Amyotonia congenita	1	1	2	1	1	2
Arthrogryposis	—	—	—	—	1	1
Ataxia	—	—	—	1	2	3
Brain tumour	—	2	2	—	—	—
Cerebral meningocele	1	—	1	—	—	—
Cerebral palsy	25	15	40	26	13	39
Cervical meningocele	—	1	1	—	—	—
Congenital deformities	4	2	6	4	2	6
Congenital dislocation of hip	—	—	—	—	1	1
Friedreich's ataxia	—	1	1	—	1	1
Hydrocephalus	4	—	4	—	1	1
Muscular dystrophy	1	3	4	5	1	6
Osteogenesis imperfecta	1	2	3	—	2	2
Perthes' disease	1	—	1	—	—	—
Poliomyelitis	—	—	—	—	2	2
Spina bifida	15	13	28	12	12	24
Transverse myelitis	—	1	1	—	—	—
Total	53	41	94	49	39	88

Cedar Lodge School

TABLE E 21

Reasons for admission	Boys	Girls	Total
Asthma	13	6	19
Bronchitis	1	2	3
Cerebral palsy	—	1	1
Congenital heart defect	1	2	3
Cystic fibrosis	2	2	4
Duodenal ulcer	2	—	2
Debility	1	1	2
Eczema	1	—	1
Epilepsy	2	—	2
Hemiplegia	2	—	2
Maladjustment	3	2	5
Muscular dystrophy	1	—	1
Nephritis	1	—	1
Perthes' disease	1	—	1
Recto-vaginal fisula	—	1	1
Rheumatoid arthritis	—	1	1
Talipes equino varus	—	1	1
Number admitted during 1970	31	19	50
Number discharged during 1970	28	23	51
Average duration of stay in months	35	42	38
Total on roll at 31st December, 1970	91	59	150



TABLE E 22

## Miscellaneous

Ultra-violet light treatment	916	
Physiotherapy:		
Children treated	836	
Total attendances	9,656	
Cases discharged	336	
Waiting list	25	
Speech therapy:		
Total attendances	6,792	
Audiometry:		
Children sweep tested at school	14,907	
Children failing sweep test	3,445	
Children referred to specialist	357	
Vision tests:		
Children tested by health visitors	6,388	
Cleanliness:		
Children inspected	117,844	
Children found to have nits	7,229	(6.13%)
Children found to have vermin	3,072	(2.61%)
Children cleansed at clinics	5,084	
B.C.G. vaccinations:		
Vaccinations at School Clinics	4,621	
Vaccinations by other authorities	2,110	
Children tuberculin tested	7,045	
Children showing positive reaction	365	(7.3%)
Children showing negative reaction	4,635	(92.7%)
Vaccinated children retested—positive	1,787	(87.4%)
Vaccinated children retested—negative	258	(12.6%)
Nurses' home visits	20,720	
Nurses' school visits (other than routine inspections)	6,562	
Medical Officers' visits	110	
Eye specialist:		
Children refracted	5,667	
Children given post-mydriatic examination	3,422	
Children examined for other eye conditions	698	
Children referred for orthoptic treatment	325	
Paediatrician:		
Children examined at special schools	237	
Psychiatrist:		
New cases	—	
Total attendances	—	
Surgeon:		
Children examined at special schools	237	
General anaesthetics	3,274	
Education Act Sections 32 and 53:		
Children reported to N.I. Hospitals Authority (Section 32 A)	9	
Children reported to Welfare Authority (Section 32 B)	57	
Children reported to N.I. Hospitals Authority (Section 53)	26	
Youth employment:		
Children examined under Employment Bye-Laws	32	
Children found unfit for employment	—	
Reports to Youth Employment Service on school-leavers	225	

# REPORT OF THE CHIEF DENTAL OFFICER FOR THE YEAR 1970

## *Dental Inspection in Schools*

During the year under review, children in all age groups attending primary and secondary schools participating in the Health Committee's scheme were provided with annual dental inspection. In addition, children attending nursery and special schools were provided with dental inspection twice annually. Statistical information relating to this aspect of the department's activities is provided in table F1.

## *Attendances at Clinics*

The pattern of attendance was similar to that of the previous year, when there was a departure from the usual relationship between consent and attendance. Consent to dental care at school clinics was given in respect of 11,849 children, while 9,176 children attended. This constitutes an increase of 6.9% in the number of children consenting and a reduction of 6.6% in the number of children attending clinics, compared with the previous year. The civil disturbances, as in 1969, again appear to have been the main factor in the decline of attendances.

## *Treatments*

The filling and extraction ratios continue to remain at 2.3 and 0.7 respectively and the overall number of treatments per child remains at 3.9. Comparison with the year 1969 shows a reduction of 5.2% in the total number of treatments, which is accounted for by the reduced attendance. In regard to orthodontics, the staffing situation remains unchanged and this service continues to be operated by one sessional orthodontist and two of the department's dental officers. Statistical information relating to all treatments is provided in table F2.

## *Pre School Dental Service*

This service, which, in the year 1968, reached a peak of 1,119 young children dentally inspected and 582 provided with dental care, suffered its first set back in 1969 with 764 children inspected and 477 cared for in school clinics. In 1970 these figures have further declined to 555 and 369 children respectively and, regrettably, there appears to be little if any ground for optimism, as long as the present civil unrest persists, that the process of decline can be reversed.

## *General Remarks*

The health services in Northern Ireland will in the near future enter upon a new era, when all medical and related services will come under the control of one Authority. Such an arrangement cannot fail to remove many of the existing barriers to full co-operation and provide a more enlightened approach to health. Integration of the various sections of the health service will present many problems and changes in the existing pattern are inevitable both in the short term and long term, but as far as the school health service is concerned, it would seem unwise in the short term to change any of its existing functions.

For a long period of years the school dental service has remained in a state of stasis, unable to develop because of the apathy which surrounded it on all sides. Inevitably the service carried a poor public image and this was not lost upon the new graduate in dentistry, who looked elsewhere to create a career. The inception of the Health Services Act of 1948 provided no immediate relief to the problems of the school dental service, either by improving the manpower situation or in the provision of better amenities; rather did the contrary obtain. Many dental officers, who had remained loyal to the school dental service up to that time, found the greater attraction of private practice impossible to ignore and left the service. Plans to modernise the school dental service were however receiving attention but it was not until 1961 that the first of two new purpose built clinics assumed practical form and today the service in Belfast has two such clinics.

The public image of the service since 1961 has shown a progressive change for the better and the fast dwindling support which was evident prior to 1960 has now changed to substantial support which has remained remarkably constant to the present time. As it now stands, the school dental service commands great potential in the war against dental disease and is only prevented from playing its full part in this war by three factors: (a) the lack of more clinical facilities, (b) lack of manpower (c) public attitudes to dentistry.

There can be little doubt that in time more clinical facilities will become available in residential areas not convenient to existing clinics, but the manpower problem could prove intractable. Greater liaison with the Dental School in publicising the service as a career, together with the use of ancillary dental staff, could relieve the staffing problem. Public attitudes to dentistry are still far from favourable and it could be said that such attitudes lag lamentably behind the progress of dental science. It could be advantageous, as a first exercise under the new Health Administration, for the school dental service to make a study of public attitudes. There is little doubt that such a study would be rewarding and could form the basis for a new approach to Dental Health Education.

My concluding remarks are directed in appreciation of the support which has been accorded me by all sections of the Health Department—especially the Dental Section—during the course of the year and to Principals and Teachers of City schools for the interest shown and the facilities provided in respect of dental inspections and other dental activities.

S. R. SHEANE, L.D.S.,

*Chief Dental Officer.*



# Dental Inspection

TABLE F 1

Participating schools		*Special	*Nursery	Non partici- pating	Pre- school
Total on school rolls	78,055	1,552	665	2,507	—
Total inspected	74,182	2,060	1,032	2,337	555
Age groups 5 to 7	18,715	187	—	—	—
Other age groups	55,467	1,873	—	—	—
Total defective	44,076	1,058	376	912	388
Defective percentage	59.4	51.4	36.4	39.0	69.9
Consenting to treatment	39,096	905	336	—	388
By Health Department	11,657	473	137	—	388
By own dentist	27,639	432	199	—	—
Appointments issued	11,657	473	137	—	388
Inspection sessions	528	26	27	—	—
Clinic check inspections	7,542	—	—	—	178

\* Special and Nursery Schools inspected twice annually. Figures extracted from participating schools totals.

# Dental Treatment

TABLE F 2

Participating schools		*Special	*Nursery	Pre-school	Totals
Extractions					
Temporary teeth	4,978	127	42	384	5,362
Permanent teeth	1,464	70	3	—	1,464
Total	6,442	197	45	384	6,826
Anaesthetics					
General	3,136	102	31	226	3,362
Local	1,982	31	—	7	1,989
Total	5,118	133	31	233	5,351
Fillings					
Temporary teeth	5,360	131	103	532	5,912
Permanent teeth	15,322	673	1	—	15,322
Total	20,682	804	104	552	21,234
Gingevectomy	3	1	—	—	3
Root canal therapy	22	—	—	—	22
Crowns	11	—	—	—	11
Crown capping	15	—	—	—	15
Scaling and polish	1,404	113	2	35	1,439
Dressings	1,433	45	20	64	1,497
Other operations	774	41	8	32	806
X-Ray films	390	14	—	1	391
Dentures provided	25	5	—	—	25
Total treatments	36,319	1,353	210	1,401	37,720
Individuals treated	9,176	323	69	369	9,545
Total treatment courses	9,485	338	54	302	9,787
Total treatment visits	21,934	747	129	1,166	23,100
Total treatment sessions	4,005	—	—	—	4,005
Orthodontics:					
Patients provided with appliances	88	2	—	—	88
Total appliances provided	156	3	—	—	156
Treatments completed	30	1	—	—	30
Treatments suspended	12	—	—	—	12
Total treatment visits	849	17	—	—	849
Total sessions	122	—	—	—	122

\* Figures extracted from participating school totals.

TABLE F 3

Clinic Accommodation	
North Belfast	{ Mountcollyer Street Lincoln Avenue
South Belfast	Academy Street
East Belfast	Cherryville Street
West Belfast	Cupar Street
Mobile clinics	Nil

TABLE F 4

Staff Complement	
Chief Dental Officer	1
Clinic Dental Officers	3
Dental Officers (full-time)	6
Dental Officers (part-time)	6
Total (expressed as full-time equivalent)	10.4
Anaesthetists	3

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